1944 INDEX TO

The OIL AND GAS JOURNAL

Special Numbers

Annual Number	January 27	Semiannual Statistical Number	July 29
Geological Number	March 23	Annual Pipe-Line Number	September 23
Annual Refinery Number	April 13	Postwar Number	November 18
Natural Gasoline Assn. Convention	April 13	Annual International Number	December 30
Natural Gas Convention Number	May 11		

Contents of Index

Technical Articles on Engineering And Operating Subjects

Drilling ..... Page 1
Production ..... Page 3
Refining ..... Page 5
Pipe Line ..... Page 9
Natural Gas ..... Page 11
Natural Gasoline ..... Page 11
Exploration ..... Page 12

General News Shaping Industry Policy and Operations

Economics ..... Page 13
Trade Associations ..... Page 16
Field Developments ..... Page 17
Foreign ..... Page 19

The List of Men Who Wrote for The Journal During 1944

Authors ..... Page 21

THE PETROLEUM INDUSTRY'S CROSS-SECTIONAL PUBLICATION

East Engin. Library

TN
860
.03
1944
Jan-Mar

E. Engin

the OIL AND GAS JOURNAL — 1944 INDEX

Technical Articles on Engineering and Operating Subjects

Drilling

	Date	Page
ACTIVITY (See Drilling under Economics)		
BARGES (See Offshore)		
BITS (See Equipment; Practices)		
BLOWOUTS; FIRES; WILD WELLS—		
Coastal Louisiana Blowout Presents Numerous Capping Problems—J. F. Flint	2-20	43
Blowouts—Causes and Prevention (Abs.)—Madden T. Works	6-17	132
Three California Blowouts Occur Within Two Weeks—L. P. Stockman	10- 7	58
CABLE TOOLS—		
Deep Pennsylvania Test Drilled With Cable-Tool Rig	1- 6	47
CASING—		
Factors Involved in Design of Long Strings of Casing—H. M. Cooley	1-20	25
Welded Surface Casing—Harry F. Simons	2-17	61
Purpose of Casing in Oil Wells	6-10	93
Physical Properties of A.P.I. Steel Casing	6-17	137
Collapse Strength of Casing	6-24	115
Tensile Strength of Casing	7- 1	87
Large Casing May Require Anchorage When Cementing	7- 8	151
Bursting Strength of Casing	7-15	109
Elongation of Casing	7-15	77
Casing Recovered and Recemented in Unusual Fishing Job in Texas	7-22	62
CEMENTING—		
Well Cementing (Abs.))—Ray S. Karl and B. C. Craft	5-18	79
Casing Recovered and Recemented in Unusual Fishing Job in Texas	7-22	62
Purposes of Cementing	7-22	193
Two-Plug Cementing Process	8- 5	73
Theory of Squeeze Cementing	8-12	99
Squeeze Cementing Methods	8-19	113
Squeeze Cementing Applications	8-26	127
Plugging Back With Cement	9- 2	63
Properties of Cement	9-16	115
Cement—Slurry Ratios	9-23	291
COMPLETION (Also see heading under Production)—		
Completion Practices at Oregon Basin Reduce Field's Well Requirements—Neil Williams	1-13	44
Drilling Fluid for the Completion of Shallow Wells—W. H. Farrand and W. A. Clark	4- 6	47
Hydrostatically Operated Bridging Plugs in Reconditioning and Completion Work—E. H. Short, Jr.	6-17	118
Completion of Ellenburger Wells in Keystone Field Requires Care—Frank B. Taylor	7-22	57
Multiple Sands Complicate Completion Problems in Eucutta Field—Neil Williams	8- 5	43
Factors Controlling Oil-Well Completions in the Illinois Basin—Carl A. Bays	9- 9	49
Factors Controlling Oil-Well Completions in the Illinois Basin—Carl A. Bays	9-16	79
Abnormal Pressures Create Drilling and Completion Problems in Deep Test—E. H. Short, Jr.	9-30	70
CORING (for Analysis, see heading under Production)		
Special Rates Instead of Day Pay for Coring Operations	1-20	56
Coring With a Reverse-Circulation Rig—Lewis Finch, Jr. and Whitney M. Elias	6- 3	49
COSTS (also see heading under Economics)—		
Rising Drilling Costs Require Examination of Expense Items	1-13	77
Cost of Rotary-Drilled Well	1-27	265
DEEP WELLS—		
Deep Pennsylvania Test Drilled With Cable-Tool Rig	1- 6	47
World's Deepest Well—E. H. Short, Jr.	4-27	100
Perseverance Displayed in Drilling Phillips Well to New Depth Record	4-27	121
Production Tests Under Way on World's Deepest Operation	5-25	70
Perforating Casing Below 15,000 Ft.—E. H. Short, Jr.	6-17	106
The Story of the World's Deepest Oil Test—Phillips Petroleum Co.'s No. 1 Ada C. Price (Abs.)—C. A. Daniels	6-17	132
Hard Drilling and Great Depths Increase Well Costs in Wheeler Ellenburger Field—Joseph C. Gordon	7-15	89
New Depth Record Established for California; Well Still Drilling	10- 7	54
Standard of California Breaks World's Deep-Drilling Record—L. P. Stockman	10-21	86
DEEPENING (See Practices and Reconditioning)		
DIRECTIONAL; ORIENTED; SURVEYS—		
Directional Salt-Dome Well Employs Highly Accurate Drilling Technique—E. H. Short, Jr.	3- 2	65
Application of Directional Drilling to Find Lost Hole in West Moore Well—Paul Reed	7- 1	61
Horizontal Drilling From Vertical Hole Pioneered in California—L. P. Stockman	8-12	58
Use of Cylinders in Directional Drilling Important Contribution to Technique—L. P. Stockman	9-16	77
Higher Recovery Predicted for Horizontally Drilled Wells	9-23	147
Directional Drilling as Development Aid in Coastal Louisiana Salt-Dome Field—Neil Williams	12- 9	66
ECONOMICS (for general main Economics division)		
ENGINEERING FUNDAMENTALS (a series)—		
Measurement of Mud Density—No. 119	1- 6	67
Viscosity of Drilling Fluid—No. 120	1-13	79
Marsh Funnel Viscosity—No. 121	1-20	59
Stormer Viscosity of Mud—No. 122	1-27	267
Gel Properties of Drilling Mud—No. 123	2- 3	141
Measuring Gel Properties—No. 124	2-10	77
Wall-Building Property of Mud—No. 125	2-17	81
Measuring Filtration Properties—No. 126	2-24	115
Measuring Filter Properties at High Pressures and Temperatures—No. 127	3- 2	77
Interpreting Filter-Test Results—No. 128	3- 9	71
Sand Content of Drilling Fluid—No. 129	3-16	101
Determining Sand Content—No. 130	3-23	143
Meaning of pH Value—No. 131	4- 6	75
Measurement of pH Value—No. 132	4-13	279
Chemical Nature of Mud—No. 133	4-27	59
Chemical Treatment of Mud for Cement Contamination—No. 134	5- 4	79
Treatment of Muds for Soluble Calcium Salts—No. 135	5-11	151
Thinning Mud With Chemicals—No. 136	5-18	91
Loss of Mud Circulation—No. 137	5-25	119
Purpose of Casing in Oil Wells—No. 138	6-10	93
Physical Properties of A.P.I. Steel Casing—No. 139	6-17	137
Collapse Strength of Casing—No. 140	6-24	115
Tensile Strength of Casing—No. 141	7- 1	87
Large Casing May Require Anchorage When Drilling—No. 142	7- 8	151
Bursting Strength of Casing—No. 143	7-15	109
Elongation of Casing—No. 144	7-22	77
Purposes of Cementing—No. 145	7-29	193
Two-Plug Cementing Process—No. 146	8- 5	73
Theory of Squeeze Cementing—No. 147	8-12	99
Squeeze-Cementing Methods—No. 148	8-19	113
Squeeze-Cementing Applications—No. 149	8-26	127
Plugging Back With Cement—No. 150	9- 2	63
Properties of Cement—No. 151	9-16	115
Cement—Slurry Ratios—No. 152	9-23	291
EQUIPMENT (also see Practices, other specific subjects)		
OPA Considers Reconversion Pricing Problems for Oil-Field Equipment	3- 9	38
Servicing Fuel-Injection Nozzles—Dr. P. H. Schweitzer	3-30	97
Heater Is Essential Part of Butane Fuel System on Drilling Rigs—Harry F. Simons	5-25	77
Giant Rig on Deep Wildcat Text Powered by Total of 1,300 Hp.—Neil Williams	6-17	89
All-Steel Triplex Slush Pump	8-26	124
Power Distribution—Use of Smaller Units Permits Greater Flexibility—Neil Williams	9- 2	35

	Date	Page
Independent Electric Rotary Drive for Steam Drilling Rig—Neil Williams	10- 7	63
Rotary Drilling Equipment—John A. Chapman	10-14	67
First Quarter Steel Allocations Equal Estimated Requirements	12- 9	59
JOURNALOG; COMPLETE DRILLING DATA—		
Discovery Well, Masterson 3,500-Ft. Pool (Tentative), Pecos County, Texas	1-13	81
Discovery Well, Clabberhill Pool, Andrews County, Texas	1-20	61
Discovery Well, Pleasant Valley Pool, Fresno County, California	2-17	83
Discovery Well, Wilcox Production, Slick Field, Goliad and DeWitt Counties, Texas	3- 2	79
Discovery Well, Guthrie Pool, King County, Texas	3- 9	73
Discovery Well, San Simon Pool, Lea County, New Mexico	3-23	145
Discovery Well, Scott & Hopper Pool, Brooks County, Texas	3-30	109
Discovery Well, Hitesville Pool, Union County, Kentucky	4-20	81
Discovery Well, Runge Field, Karnes County, Texas	5- 4	81
Extension Well, North McCallum Field, Jackson County, Colorado	5-25	121
New Pay Discovery, Arroyo Grande Field, San Luis Obispo County, Calif.	6- 3	69
Discovery Well, Durant Pool, Morgan County, Ohio	7- 8	153
Discovery Well, Sand Hills Ellenburger Field, Crane County, Texas	7-15	111
Discovery Well, Washington Field, McClain County, Oklahoma	7-22	79
Discovery Well, Vacek Pool, Ellsworth County, Kansas	8-12	103
Discovery Well, Adell Pool, Sheridan County, Kansas	9- 2	67
Discovery Well, South Tyler Pool, Smith County, Texas	10-14	117
Discovery Well, Eylau Pool, Bowie County, Texas	10-28	103
MAINTENANCE (See Practices)		
METALLURGY (all general articles consolidated in heading under Refining)		
MODERN DRILLING (Series on new rigs)—		
Mechanical Specifications—Wilson Super Titan Rig	9-30	84
Emsco J-1000 Drilling Rig	10-14	84
Bethlehem Gumbo Buster MC-650 Rig	10-28	74
Mechanical Specifications—Portable Rig's Model CT-5 Rig	11-11	96
Mechanical Specifications—Franks Mfg. Co., Tulsa, Truck-Mounted Rotary Rig With Portable Telescoping Derrick	11-25	98
Salient Features of Hopper Portable Drilling and Servicing Units	12- 9	85
MUDS; MUD PRACTICES AND SYSTEMS—		
Measurement of Mud Density	1- 6	67
Design of Mud-Conditioning Systems for Drilling Medium-Depth Wells	1-13	51
Viscosity of Drilling Fluid	1-13	79
Fluid Viscosity Key to Reverse Circulation—Harry F. Simons	1-20	41
Marsh Funnel Viscosity	1-20	58
Stormer Viscosity of Mud	1-27	267
Gel Properties of Drilling Mud	2- 3	141
Measuring Gel Properties	2-10	77
Mud-Mixing System for One-Pump Rig Uses Jet-Type Device Without Hopper	2-17	58
Wall-Building Property of Mud	2-17	81
Positive Colloid Muds—Donald C. Bond	2-24	97
Measuring Filtration Properties	2-24	115
Measuring Filter Properties at High Pressures and Temperatures	3- 2	77
Interpreting Filter-Test Results	3- 9	71
Sand Content of Drilling Fluid	3-16	101
Mud Conditioning in West Edmond Field Involves Special Treating Problems—Neil Williams	3-23	135
Determining Sand Content	3-23	143
Drilling Fluid for the Completion of Shallow Wells—W. H. Farrand and W. A. Clark	4- 6	47
Meaning of pH Value	4- 6	75
Measurement of pH Value	4-13	279
Chemical Nature of Mud	4-27	59
Chemical Treatment of Mud for Cement Contamination	5- 4	79
Drilling Precautions Adopted to Insure Hole Protection in Heidelberg Field—Neil Williams	5-11	111
Treatment of Mud for Soluble Calcium Salts	5-11	151
The Use of Modified Starch in Gulf Coast Drilling Muds (Abs.)—G. R. Gray	5-18	79
Thinning Mud With Chemicals	5-18	91
Loss of Mud Circulation	5-25	119
Special Practices Facilitate Drilling Deep Formations in Mississippi Field—Neil Williams	6-24	70
Treatment of Mud for Deep Drilling in Keystone Area of West Texas—Joseph C. Gordon	6-24	96
Control of High-Pressure Salt Water and Heaving Shale in Deep Gulf Coast Well—Neil Williams	9-23	283
High Pressures and Salt-Water Flows Controlled in Deep Coastal Wells—Neil Williams	11- 4	59
Influence of Drilling Practices on Drilling-Mud Programs—E. R. Albert, Jr.	12- 2	52
OFFSHORE—		
Distant Offshore Seismic Survey Conducted in Gulf of Mexico—E. H. Short, Jr.	8-26	87
Dredging Canals for Servicing Fields in Marsh and Swamp Districts of Louisiana—Neil Williams	10-21	95
Directional Drilling as Development Aid in Coastal Louisiana Salt-Dome Field—Neil Williams	12- 9	66
PIPE, DRILL (See Equipment; Practices)		
PRACTICES—		
Loss of Circulation Creates Hazards in Drilling Deep Florida Well—E. H. Short, Jr.	1- 6	56
Completion Practices at Oregon Basin Reduce Field's Well Requirements—Neil Williams	1-13	44
Application of Rotary Rigs for Drilling Hard Formations in Rocky Mountain Area—Neil Williams	2- 3	130
Welded Surface Casing—Harry F. Simons	2-17	61
Improved Technique Lowers Drilling Time 25 Per Cent on West Edmond Wells—E. G. Dahlgren	3-16	59
South Arkansas Operators Employ Innovations in Drilling Procedures—Paul Reed	5- 4	48
Drilling Precautions Adopted to Insure Hole Protection in Heidelberg Field—Neil Williams	5-11	111
Greater Depths and Hard Formations Increase Ordovician Drilling Costs—Joseph C. Gordon	5-18	81
Problems in Drilling Through Steeply Dipping Formations—E. H. Short, Jr.	6-10	61
Special Practices Facilitate Drilling Deep Formations in Mississippi Field—Neil Williams	6-24	70
Hard Drilling and Great Depths Increase Well Costs in Wheeler Ellenburger Field—Joseph C. Gordon	7-15	89
Drilling Rigs of All Sizes and Types Employed in Mississippi Development—Neil Williams	7-22	45
Pressure Control of Gas Well to Supply Field Fuel Demands—Neil Williams	7-22	54
Abnormal Pressures Create Drilling and Completion Problems in Deep Test—E. H. Short, Jr.	9-30	70
Results of Continuity of Operations—Warren C. Churchill	10-14	67
Drilling Practices Under Present Conditions—B. J. Dowd	10-14	108
Dredging Canals for Servicing Fields in Marsh and Swamp Districts of Louisiana—Neil Williams	10-21	95
Rio Grande Floodway Water Successfully Conditioned for Use in Drilling Rigs—E. H. Short, Jr.	10-28	63
High Pressures and Salt-Water Flows Controlled in Deep Coastal Wells—Neil Williams	11- 4	59
RECONDITIONING WORK (also see Practices)—		
Cost Records—Reconditioning	3- 9	69
Use of Gamma-Ray Curves Increases Possibilities of Successful Workover—E. H. Short, Jr.	3-16	85
Plug-back Work With Plastics—E. B. Miller	6-17	92
REVERSE CIRCULATION—		
Fluid Viscosity Key to Reverse Circulation—Harry F. Simons	1-20	41
Equipment for Reverse Circulation—Harry F. Simons	2- 3	121
Application of Reverse Circulation—Harry F. Simons	2-10	54
Coring With a Reverse-Circulation Rig—Lewis Finch, Jr., and Whitney M. Elias	6- 3	49
RIGS (See Modern Drilling; Practices)		
SAFETY—		
Safety Practices in Rotary Drilling—R. C. Sharp	10-14	108
TIME; RATE (also see Journalogs; Practices)—		
Drilling Methods in West Edmond Field Designed to Reduce Rig Time on Wells—Neil Williams	8-19	78

WEEKLY FEATURES

Numerous regular short features appearing weekly, concerning the "how" of operations; equipment, refining, pipe line, natural gas and natural gasoline developments; personals, drilling contractors and the highlights of weekly field activity are not indexed. The Journal's weekly features dealing with every phase of the industry are so variegated in scope that listing herein was impractical.

Production

	Date	Page
ACID TREATMENT—		
Some Recent Advances in Well-Treating Methods and Equipment (Abs.)—P. E. Fitzgerald	4-20	68
CEMENTING, SPECIAL PURPOSES (also see heading under Drilling)—		
Plug-Back Work With Plastics—E. B. Miller	6-17	92
Cementing Method Developed to Seal Perforations in Deep Wells	8- 5	53
CHEMISTRY—		
Chemical Composition of Oil	9-30	109
Properties and Characteristics of Crude Oils	10- 7	99
CHOKES—		
Choke Control of Gulf Coast Wells—J. E. Loeffler	10-21	105
Choke Control of Gulf Coast Wells—No. 2—J. E. Loeffler	10-28	89
Choke Control of Gulf Coast Wells—No. 3—J. E. Loeffler	11-11	91
Choke Control of Gulf Coast Wells—No. 4—J. E. Loeffler	11-18	214
CLEANING OUT (see Reconditioning, also same under Drilling)—		
COMPLETION (Multiple type listed separately; also see Drilling section)—		
Completion Practices at Oregon Basin Reduce Field's Well Requirements—Neil Williams	1-13	47
Drilling Fluid for the Completion of Shallow Wells—W. H. Farrand and W. A. Clark	4- 6	47
Multiple Sands Complicate Completion Problems in Eucutta Field—Neil Williams	8- 5	43
Factors Controlling Oil-Well Completions in the Illinois Basin—Carl A. Bays	9- 9	49
Factors Controlling Oil-Well Completions in the Illinois Basin—Carl A. Bays	9-16	79
Abnormal Pressures Create Drilling and Completion Problems in Deep Test—E. H. Short, Jr.	9-30	70
COMPRESSORS (also see headings under Pipe Line and Natural Gas)—		
Recovering Residual Gas With a Rotary Compressor	4-20	79
Portable Reciprocating-Type Gas-Compressor Units	4-27	57
CORE ANALYSIS—		
Geometrical Orientation of Cores—Philip Subkow	6-10	79
Core Analysis: Methods and Applications—A Summary—Kenneth B. Barnes	10-21	98
Porosity, Number of Voids, and Surface Area—No. 2—Park J. Jones	11-11	87
Effect of Sandstone and Oolitic Reservoir Rocks on Production of Oil	11-11	109
Properties of Water Found in Reservoirs—No. 3—Park J. Jones	11-18	205
Pore Systems in Reservoir Rocks	11-18	245
Interstitial Water, Gravity, and Capillary Pressure No. 4—Park J. Jones	11-25	83
Permeability, Type of Pay, and Interstitial Water—No. 5—Park J. Jones	12- 2	73
Core Data as a Production Tool—Park J. Jones	12- 9	89
Calculating Porosity of Reservoirs	12- 9	99
Measuring Radial Permeability of Large Core Samples	12-16	105
CORROSION (for other articles, see Pipe Line, Natural Gas, Refining)—		
Corrosion in High-Pressure Gas-Distillate Wells—Harry F. Simons	1- 6	46
A Study of Corrosion in Gas and Condensate Wells in Katy Field, Texas—F. W. Jessen	5- 4	53
High-Pressure Production Equipment Corrosion—Abs.)—Thomas S. Bacon	6-17	132
Radiographic and Magnetic Inspection Reduces Equipment Failure—E. H. Short, Jr.	7- 8	135
Condensate Corrosion Study Launched	8- 5	37
Causative Agents of Corrosion in Distillate Field—Paul L. Menaul	10-11	80
Radiographic Inspection of Oil-Field Equipment in Place a Convenient Tool—E. H. Short, Jr.	11-25	91
Plastic Coating Used to Prevent Corrosion of Oil-Field Equipment	12- 2	59
COSTS—		
Maintenance Expense of Individual Wells	5-18	89
Preparation of Cost Estimates	7- 1	85
CYCLING (also see Pressure Maintenance)—		
Distillate Production Corp. of Houston Completes Its New Cycling Plant Designed for Obtaining High Percentage of Propane and Butane—E. H. Short, Jr.	3-16	67
Paloma Cycling Plant Engineered for Maximum Flexibility and Efficiency—L. P. Stockman	3-23	128
Production of Natural Gasoline and Cycle Products to Rise 27,000 Bbl. Daily—H. Stanley Norman	4-13	121
Louisiana's Output of Cycling Products to Be Doubled by Erath Plant—R. L. Keyes	4-13	295
General Review of Development and Economics of Natural-Gas Cycling Plants—J. M. Flaitz	4-20	46
Cycling Has Significant Relation With Natural Gas Operations—R. W. Ducker and F. H. Dotterweich	5-11	107
New Plant Combines Refining, Natural Gasoline and Pressure Maintenance	8-12	63
Unloading Retrograde Condensate From Dually Completed Wells—E. H. Short, Jr.	11-18	225
Triple Injection Well Successfully Completed in Brooks County, Texas—E. H. Short, Jr.	12-23	66
DIESEL—		
Servicing Fuel-Injection Nozzles—Dr. P. H. Schweitzer	3-30	97
DISTILLATE FIELDS (See Cycling)—		
ECONOMICS (for general field, see Economics)—		
Calculating Value of Oil Property	4- 6	73
Rapid Return on Investment	4-13	277
ELECTRIC LOGGING, PILOTS—		
Use of Gamma-Ray Curves Increases Possibilities of Successful Workover—E. H. Short, Jr.	3-16	85
Subsurface Correlation by Detailed Electrolog Tabulation—M. M. Kornfeld	3-23	109
Some Recent Advances in Well-Treating Methods and Equipment (Abs)—P. E. Fitzgerald	4-20	68
Application of the Electric Pilot to Well Completions, Acidizing, and Production Problems in the Permian Basin (Abs.)—P. S. Lehnhard and C. J. Cecil	5-18	79
Interstitial Water, Gravity, and Capillary Pressure—No. 4—Park J. Jones	11-25	83
Permeability, Type of Pay, and Interstitial Water—No. 5—Park J. Jones	12- 2	73
A Method for Determining Water Input Profile—R. J. Pfister and R. L. McCormick	12-16	78
Resistivity of Pay and Nonpay—No. 7—Park J. Jones	12-16	88
Characteristics of Electric Logs—No. 8—Park J. Jones	12-23	75
Water-Input Profile Measurements—R. L. McCormick and R. J. Pfister	12-23	92
Application of Electric-Log Data—No. 9—Park J. Jones	12-30	270
EMULSIONS (See Treating)		
Chemical Composition of Oil—No. 153	9-30	109
Properties and characteristics of Crude Oils—No. 154	10- 7	99
Formation of Oil—No. 155	10-14	115
Migration of Oil and Origin of Oil Pools—No. 156	10-21	139
Practical Geology of Oil: Description of Oil Reservoirs—No. 157	10-28	99
Practical Geology of Oil: Migration of Hydrocarbons—No. 158	11- 4	77
Effect of Sandstone and Oolitic Reservoir Rocks on Production of Oil—No. 159	11-11	109
Pore Systems in Reservoir Rocks—No. 160	11-18	245
Effect of Natural Forces on Oil Production—No. 161	11-25	101
Engineering Aspects Connected With Examining Undeveloped Areas and Leases—No. 162	12- 2	87
Calculating Porosity of Reservoirs—No. 163	12- 9	99
Measuring Radial Permeability of Large Core Samples—No. 164	12-16	105
Methods of Determining Viscosity of Oil—No. 165	12-23	99
Measurement of Viscosity Under Reservoir Conditions—No. 166	12-30	275
ENGINEERING FUNDAMENTALS (A Series) (See Drilling)		
EQUIPMENT (Also See Headings of Specific Uses)—		
OPA Considers Reconversion Pricing Problems for Oil-Field Equipment	3- 9	36
Economics of Engine Cooling	5- 4	77
Cost Records for Servicing Units	5-11	149
Hydrostatically Operated Bridging Plugs in Reconditioning and Completion Work—E. H. Short, Jr.	6-17	118
MAINTENANCE—		
Radiographic and Magnetic Inspection Reduces Equipment Failure—E. H. Short, Jr.	7- 8	135
Electrification of Salt Creek Field Embraces Approximately 1,000 Wells—Neil Williams	9-16	107
New Equipment—W-K-M Gate Valve	11- 4	79
Plastic Used to Prevent Corrosion of Oil-Field Equipment	12- 2	59
Proper Maintenance and Equipment Economies Are Stressed at North Burbank—Kenneth B. Barnes	12- 2	62
GAS (See NATURAL GAS)		
GAS LIFT—		
Deep Gas Lift on Gulf Coast—E. H. Short, Jr.	2-17	49

	Date	Page
Rotation-Type Gas-Lift System—E. H. Short, Jr.	5-18	67
GATHERING—		
Streamlined Production System—Neil Williams	3- 9	41
Light-Weight, Bolted-Coupling Construction Tested by Stanolind—Paul Reed	3- 9	53
Continental Uses Central Metering and Separator Batteries in North Texas—Harry F. Simons	3-30	61
Recovering Residual Gas with a Rotary Compressor	4-20	79
Pressure Control of Gas Well to Supply Field Fuel Demands—Neil Williams	7-22	54
METALLURGY (All General Articles Consolidated in Heading Under REFINING)		
METERING (Included With GATHERING)		
MUDS (See Heading Under DRILLING)		
MULTIPLE COMPLETIONS—		
Multizone Completion and Reworking Restrictions in PAO 11 Relaxed by PAW—Henry D. Ralph	1- 6	32
Dual Completion With Crossover Packer in Dorcheat Pool, Arkansas—Paul Reed	3-30	93
Changeover Packers Solve One Problem in Embar Field Dual Completions—Joseph G. Gordon	6-17	109
Multiple Sands Complicate Completion Problems in Eucutta Field—Neil Williams	8- 5	43
Unloading Retrograde Condensate from Dually Completed Wells—E. H. Short, Jr.	11-18	225
Determining Fluid Movement in Wells—Sherman L. Pease	12- 2	82
Triple Injection Well Successfully Completed in Brooks County, Texas—E. H. Short, Jr.	12-23	66
OIL SHALE—		
Oil Shale of Central Texas—F. B. Plummer and Bruce Grant	10- 7	66
PACKERS (Also See COMPLETIONS)—		
Dual Completion with Crossover Packer in Dorcheat Pool, Arkansas—Paul Reed	3-20	93
Changeover Packers Solve One Problem in Embar Field Dual Completions—Joseph G. Gordon	6-17	109
PARAFFIN—		
Paraffin Important Problem in Hydraulic Pumping —J. Zaba	4-13	271
Cleaning Paraffin from Flow Lines in Mississippi Field—Neil Williams	7-15	96
Paraffin Problem in Panhandle Overcome by Water, Steam and Pressure	8-12	83
PERFORATING (Also See COMPLETION Under DRILLING; PRODUCTION)—		
Lane-Wells Celebrates Perforation of Fifty-Thousandth Oil Well	1-27	107
Perforating Casing Below 15,000 Feet—E. H. Short, Jr.	6-17	106
PRESSURE MAINTENANCE—		
Pressure Maintenance by Conjoint Injection of Gas and Water—A Wartime Suggestion—Frederick Squires	2-24	78
Many Factors to Consider in Gasoline-Plant Projects —W. F. Matheny	4-27	61
Pressure Maintenance Is Ordered for Lake Creek	7-29	134
New Plant Combines Refining, Natural Gasoline and Pressure Maintenance	8-12	63
Control and Detection of Reservoir Gas Movement in Pressure-Control Operations—N. Van Wingen and E. P. Valby	12- 2	77
PRODUCTION MECHANICS, Oil, Condensate & Natural Gas (A Series)—		
Elements of Production Mechanics—No. 1	11- 4	53
Porosity, Number of Void, and Surface Area—No. 2	11-11	87
Properties of Water Found in Reservoirs—No. 3	11-18	205
Interstitial Water, Gravity, and Capillary Pressure —No. 4	11-25	83
Permeability, Type of Pay, and Interstitial Water—No. 5	12- 2	73
Core Data as a Production Tool—No. 5	12- 9	89
Resistivity of Pay and Nonpay—No. 7	12-16	88
Characteristics of Electric Logs—No. 8	12-23	75
Application of Electric-Log Data—No. 9	12-30	270
PLUG-BACK WORK—		
Plug-Back Work With Plastics—E. B. Miller, Jr.	6-17	92
Hydrostatically Operated Bridging Plugs in Reconditioning and Completion Work—E. H. Short, Jr.	6-17	118
PUMPING—		
Oil-Well Pumping Practices—J. Zaba—Jan. 6, Feb. 3, Feb. 10, Feb. 17, Feb. 24, Mar. 9, Mar. 16, Mar. 23, Apr. 6, Apr. 13, May 4, May 25, June 3, June 24, July 1, July 8, July 15.		
Methods for Engineering Peak Power Requirements for Single Pumping Rigs—E. A. Braker	1-13	65
Methods for Engineering Peak Power Requirements of Single Pumping Rigs—E. A. Braker	1-20	36
Economic Factors Affecting Tubing Replacement	2- 3	139
Effect of Engine Power Impulses on Single Pumping-Rig Speed Variations—E. A. Braker	3- 2	60
Paraffin Important Problem in Hydraulic Pumping —J. Zaba	4-13	271
Sucker-Rod Pumping of Deep Production	4-27	41
Deepest Sucker-Rod Pumping East of Rockies Is in Buckner Pool, Arkansas—Paul Reed	4-27	41
Sucker-Rod Pumping of Deep Production	4-27	41
An Evaluation of the Rate of Slippage of Oil Past Oil-Well Pump Plungers—Glenn M. Stearns	6- 3	61
Optimum Date of Tubing Replacement	6- 3	67
Theory and Practice in Equipping and Operating a Pumping Well—A. S. Ross	6-17	103
Optimum Pumping Cycles	6-17	138
Electrification of Salt Creek Field Embraces Approximately 1,000 Wells—Neil Williams	9-16	107
RECONDITIONING (Also See Heading Under DRILLING)—		
Multizone Completion and Reworking Restrictions in PAO 11 Relaxed by PAW—Henry D. Ralph	1 6	32
Cost Records—Reconditioning	3- 9	60
Use of Gamma-Ray Curves Increases Possibilities of Successful Workover—E. H. Short, Jr.	3-16	80
Well Pressure Affects Workover Procedure—Harry F. Simons	3-23	116
Exclusion of Water From Oil Wells—Eugene A. Stephenson and R. T. Amstutz, Jr.	6- 3	61
Hydrostatically Operated Bridging Plugs in Reconditioning and Completion Work—E. H. Short, Jr.	6-17	118
Cementing Method Developed to Seal Perforations in Deep Wells	8- 5	50
Paraffin Problem in Panhandle Overcome by Water, Steam and Pressure	8-12	83
Report on Air-Gas Injection and Well Conditioning	12- 9	75
REPRESSURING—		
Pressure Maintenance by Conjoint Injection of Gas and Water—A Wartime Suggestion—Frederick Squires	2-24	78
Air Repressuring for Wartime Needs of The Ohio Oil Co.—Paul Reed	4- 6	39
Many Factors to Consider in Gasoline-Plant Projects —W. F. Matheny	4-27	61
Increased Oil Recovery by Gas Injection from Old Producing Sands at Salt Creek—Neil Williams	5-18	57
Repressuring Program for Plymouth Pool Maintains Improved Production Rate—Paul Reed	6-10	58
Permian Basin Operators May Expand Secondary Recovery—Frank B. Taylor	9- 2	43
North Burbank May Be Largest Individual Secondary-Recovery Reserve—Kenneth B. Barnes	11-25	62
Report on Air-Gas Injection and Well Conditioning	12- 9	75
Triple Injection Well Successfully Completed in Brooks County, Texas—E. H. Short, Jr.	12-23	66
RESERVES (See Heading Under ECONOMICS)		
RESERVOIR—		
Rate of Withdrawal Held Most Important Factor in Ultimate Recovery of Oil (Results of 4-Year Engineering Study)	1-13	25
Petroleum Reservoir and Efficiency and Well Spacing—Stuart Buckley	3-23	98
Mississippi Urged to Adopt Adequate Petroleum-Conservation Legislation	5-18	43
Reservoir Control and Behavior Discussed at A.I.M.E. Meeting—E. H. Short, Jr.	5-18	44
An Industry Discussion of the Reservoir Performance of Limestone Formations—A. C. Bulnes and R. V. Fitting	5-18	70
Decline Curve Analysis (Abs.)—J. J. Arps	5-18	70
Exclusion of Water From Oil Wells—Eugene A. Stephenson and R. T. Amstutz, Jr.	6- 3	61
Treatment of Gas Sands to Prevent or Overcome Detrimental Effect of Water—K. J. Sonney and C. E. Williams	6- 3	61
Reservoir Performances—(Abs.)—John J. Mullane	6- 3	61
New Electrical Device Predicts Petroleum-Reservoir Behavior—Dr. W. A. Bruce	6-24	63
Nation's Fields Producing at Maximum Efficient Rate—Henry D. Ralph	7-29	122
Precipitation of Asphalt From Crude Oil by Flow Through Silica—Herman Dykstra, Karl Beu, and Donald L. Katz	9-30	79
Elements of Production Mechanics No. 1—Park J. Jones	11- 4	53
Effect of Natural Forces on Oil Production	11-25	101
Control and Detection of Reservoir Gas Movement in Pressure-Control Operations—N. Van Wingen and E. P. Valby	12- 2	77
Determining Fluid Movement in Wells—Sherman L. Pease	12- 2	82
SAFETY—		
Vocational Training for Petroleum Production—(Abs.)—E. L. Williams	6-17	132

	Date	Page
Protecting Pumping Equipment From Fire Damage—C. M. Rosebrugh	9-23	156
SECONDARY RECOVERY (more than one type treated)—		
Research Credited With Solving Problems of Recovery in Nation's Oldest Oil Field—H. Stanley Norman	4-20	29
Permian Basin Operators May Expand Secondary Recovery—Frank B. Taylor	9- 2	43
Higher Recovery Predicted for Horizontally Drilled Wells	9-23	147
North Burbank May Be Largest Individual Secondary-Recovery Reserve—Kenneth B. Barnes	11-25	62
Wilcox Sand at Oklahoma City May Get Secondary-Recovery Project—Charles J. Deegan	12-16	60
SEPARATION (Oil and Gas)—		
Stage Separation of Oil and Gas Mixtures Increases Profits	2-10	75
Continental Uses Central Metering and Separator Batteries in North Texas—H. F. Simons	3-30	61
SHOOTING—		
Well-Conditioning Torpedo Employs New Principle	9- 9	93
SPACING, WELL—		
Well Spacing—Its Effect on Recoveries and Profits	2-17	75
States Promised Relaxation of Control Over Well Spacing	3- 2	32
Critical Factors to Be Considered in Well Spacing—M. G. Cheney	3-23	94
Petroleum Reservoir Efficiency and Well Spacing—Stuart Buckley	3-23	98
Spacing Regulations to Be Relaxed in Illinois, Panhandle, North Texas	4-13	115
PAW Action Awaited on Davies' Pledge to Consider Decentralization of Spacing Controls—E. H. Short, Jr.	6-24	52
Texas and Louisiana Fields Granted 10-Acre Well Spacing	8-26	73
North and West Central Texas Spacing Restrictions Eased	9- 2	28
SUCKER RODS (also see Pumping)—		
Economic Factors Affecting Sucker-Rod Replacement	3-30	107
Sucker-Rod Pumping of Deep Production	4-27	41
TANKAGE; STORAGE—		
Streamlined Production System—Neil Williams	3- 9	41
Petroleum Conservation Demands Modern Storage Equipment—F. L. Goldsby	4-13	220
Flame Priming Storage Tanks	9-23	250
TREATING OF OILS—		
Pressure-Operated Oil Treater Saves Equipment and Production Handling—Neil Williams	2-17	47
Savings Effected by "Rolling" Tanks With Heated Oil to Clean Bottoms—Neil Williams	7- 1	55
UNITIZATION—		
Streamlined Production System—Neil Williams	3- 9	41
Legal Aspects of Unitization—History, Evolution, and Present Status of the Law—R. L. Benoit	4-13	297
Elk Hills Unit Plan Approved	5-25	66
Enactment of Bill Authorizing Elk Hills Unitized Operation Expected in Few Days—Henry D. Ralph	6- 3	29
WATER DISPOSAL—		
Salt-Water Disposal Costs	2-24	113
Pure Oil Company Operates Closed-Type Salt-Water-Disposal System at Pauls Valley—Neil Williams	4-20	43
A Method of Handling Salt-Water Disposal Including Treatment of Water—H. W. Elliston and W. B. Davis	6- 3	59
WATER FLOODING—		
Water-Flooding Cost Factors	1- 6	65
Applied Water-Flooding Experiments in Illinois—Paul Reed	1-27	262
Pressure Maintenance by Conjoint Injection of Gas and Water—A Wartime Suggestion—Frederick Squires	2-24	78
Kansas Water-Flood Plant Incorporates New Features in Engineering Design—Frank B. Taylor	7- 1	70
Compact and Enclosed Water-Flood System—Frank B. Taylor	7-29	148
Studies Indicate Water Drives in Illinois Pools Increase Ultimate Recovery—Kenneth B. Barnes	10-14	89
North Burbank May Be Largest Individual Secondary-Recovery Reserve—Kenneth B. Barnes	11-25	62
A Method for Determining Water Input Profile—R. J. Pfister and R. L. McCormick	12-16	78
Water-Input Profile Measurements—R. L. McCormick and R. J. Pfister	12-23	92
WATER SUPPLIES—		
Water Purification Processes Adaptable to Changing River Conditions—Orin M. Elliott	2- 3	103
Water Systems at Plant Supply Steam, Process, and Personnel Requirements—E. H. Roy	7- 8	124

Refining

	Date	Page
ALKYLATION—		
Latest Addition to Sun Refinery Greatly Swells 100-Octane Output—J. P. O'Donnell	2- 3	68
Availability of Butylenes Main Consideration in Design of HF Alkylation Unit—Paul D. Barton	2- 3	78
Alkylation, Catalytic Cracking, Hydrocarbon Properties Discussed by American Chemists	4-13	122
Propane Refrigeration for Alkylation Units	4-13	128
Mohawk Converts Refinery Streams Into Aviation Alkylate	6-10	91
Alkylation and Isomeration Facilities for 9,500 Bbl. Per Day Are Provided—Frank Poole and G. H. Branscombe	7- 8	92
Champlin Aviation-Fuel Plant Exceeding Designed Alkylate Capacity—Arch L. Foster and R. B. Tuttle	8- 5	67
Root Petroleum Co. Making More Alkylate Than Plant Was Designed For—Arch L. Foster	8-19	75
The Application of the Carbonium-ion Theory to the Alkylation of Isoparaffins—(Abs.)—F. G. Ciapetta	9-16	97
Largest U. S. Refinery Incorporates Many War Operations	12-16	72
ALLOYS (see Metallurgy)—		
ASPHALT—		
Asphaltization Tests for Lubricating Oil—J. Faust	1-20	29
The Molecular Weights of Asphalts and Their Constituents—(Abs.)—George W. Eckert and Bruce Weetman	9-16	95
ANALYSIS, METHODS OF (also see Laboratory)—		
The Abbe Refractometer and Use of Dispersion Measurements—Morden G. Brown	1- 6	42
Radiation—The New Petroleum Analytical Tool—C. H. Schlesman and F. P. Hochgesang	1-13	41
Use of Mass Spectrometry in Routine Analysis of Refinery Gas Samples—J. G. Schaafsma	4- 6	57
Standard Samples of Hydrocarbons	5-25	85
The Spectrometric Analysis of Gases—L. J. Brady	8-12	87
Time-Saving Computing Instruments Designed for Spectroscopic Analysis—T. D. Morgan and F. W. Crawford	8-26	100
A Universal Pressure Rectifying Column—(Abs.)—Edgar S. Byron, John H. Bowman and James Coull	9-16	95
Determination of Basic Nitrogen in Hydrocarbon Feed Stocks—(Abs.)—Leon Donn and Harry Levin	9-16	97
A Rapid Test for Isobutane Fractions in Natural-Gasoline-Plant Residue Gases—G. M. Liljenstein and W. M. Schaufelberger	12-16	96
AVIATION (see Fuels; Lubricants)—		
BLENDING (for components which may be used, see Fuels; Lubricants)—		
Socony-Vacuum Uses Continuous Automatic Lead Blender—J. P. O'Donnell	4-27	43
Handling Loss Eliminated in Blending Crudes	5-25	79
BUYERS' GUIDE—Appears in Section 2 (Separate)—	4-13	
BUTADIENE (also see Rubber, Synthetic)—		
RUBBER (Butadiene)—		
Butadiene Output Hitting Stride	2-17	34
Petroleum Butadiene Is Economically Competitive With Natural Rubber	2-24	62

	Date	Page
Industry Praised for Patience in Waiting Turn on Priorities for Butadiene Plants—Arch L. Foster	3- 2	30
Pooling of Raw-Material Resources Gives the United States Its Largest Butadiene-From-Petroleum Factory—Arch L. Foster	3- 2	43
Sarnia Plant is Complete Rubber Factory, With Capacity of 38,000 Tons Annually—Arch L. Foster	3-16	62
Synthetic-Rubber Plan to Suffer Unless Engineers Are Spared by Military—Henry D. Ralph	3-23	62
California's Synthetic-Rubber Project Is Now in Full Operation—L. P. Stockman	4-27	34
Butadiene Plant Has Capacity of 55,000 Short Tons Per Year—W. A. Burhouse and D. R. McKinney	7- 8	119
Technical Literature	8- 5	50
BUTYLENES (also see Rubber, Synthetic)—		
Availability of Butylenes Main Consideration in Design of HF Alkylation Unit—Paul D. Barton	2- 3	78
Production of Heptenes and Heptanes From Propylene and Butylenes—(Abs.)—V. N. Ipatieff and R. E. Schaad	9-16	97
Butane Dehydrogenation by the Houdry Process—R. C. Lassiat and F. D. Parker	11-18	229
CATALYSIS, CATALYSTS (also see Cracking, Catalytic)—		
Hydrocarbon Reactions in the Presence of Cracking Catalysis. 3. Cyclohexane, Decalin and Tetralin—(Abs.)—Herman S. Bloch and Charles L. Thomas	4-13	122
Reaction of Methylcylopentane With Olefins in the Presence of Sulfuric Acid and Hydrogen Fluoride Catalysts—(Abs.)—Herman Pines and V. N. Ipatieff	4-13	123
Hydrocarbon Reactions in the Presence of Cracking Catalysts. 4. Removal of Side Chains From Aromatics—(Abs.)—Charles L. Thomas, James Hoekstra and John T. Pinkston	4-13	123
The Alkylation of Isoparaffins by Olefins in the Presence of Hydrogen Fluoride—(Abs.)—Carl B. Linn and Aristid V. Grosse	4-13	123
Hydrocarbon Reactions in the Presence of Cracking Catalysts. 2. Hydrogen Transfer—(Abs.)—Charles L. Thomas	4-13	123
Bauxite As An Adsorbent, Catalyst, and Catalyst Carrier—H. L. King, Jr., C. D. Laughlin, and H. J. Gwyn, Jr.	4-13	236
Bauxite As An Adsorbent, Catalyst, and Catalyst Carrier—H. L. King, Jr., C. D. Laughlin, and H. J. Gwyn, Jr.	4-20	71
Apparatus for Screening Catalyst	7- 1	69
Catalytic Dehydrogenation of Natural-Gas Hydrocarbons—C. H. Riesz, T. L. Pelican and V. I. Komarewsky	7-15	67
Production of Isoparaffin Hydrocarbons by Cracking of Petroleum Fractions in Presence of Aluminum Chloride—(Abs.)—V. I. Komarewsky and Lee Warson	9-16	97
Nitrogen Adsorption Isotherm Studies of a Supported Catalyst and Its Support. The Effect of Sintering on Surface Area and Structure—(Abs.)—Herman E. Ries, Jr., Robert A. Van Nordstrand and John W. Teter	9-16	97
A Method of Determining Carbon in Catalyst Deposits—(Abs.)—James Hoekstra	9-16	97
CHEMISTRY, CHEMICALS—		
"Grain" Alcohol From Cracked Hydrocarbon Gases—Arch L. Foster	1- 6	39
Alkylation, Catalytic Cracking, Hydrocarbon Properties Discussed by American Chemists	4-13	122
Vapor Pressures in Hydrocarbon-Furfural-Water Systems—(Abs.)—Clark Holloway, Jr., and S. H. Thurber	4-13	123
Pressure Dependence of the Rate of Gasification of Carbon—(Abs.)—B. R. Warner	4-13	124
Phase Equilibria in the Ethane-Ethylene-Acetylene System—(Abs.)—J. Lloyd McCurdy and D. L. Katz	4-13	124
Aliphatic Hydrocarbon Derivatives Available in Quantity	9- 2	55
Texaco and American Cyanamid Organize Jefferson Chemical Co.	12- 9	55
COMPOUNDING (See Blending)—		
CONSTRUCTION METHODS—		
Subsoil Conditions and Foundations—C. B. Whyte and Kjetil Haugeto	7- 8	121
CONTROLS (see Instrumentation)—		
CORROSION—		
Corrosion Protection of Tanks	11- 4	75
CRACKING, CATALYTIC—		
Humble's Second Catalytic Cracker Is Finished	2- 3	27
Alkylation, Catalytic Cracking, Hydrocarbon Properties Discussed by American Chemists	4-13	122
Properties of Typical Products Refined by Houdry Cracking Process—E. A. Smith and R. E. Bland	4-13	200
Gas-Oil Cracking by the Cycloversion Process—Walter A. Schulze and C. J. Helmers	4-13	225
Shell Dedicates Twin Cat Crackers	5- 4	38
Suspensoid Catalytic Cracking System Gives Nearly 60 Per Cent Gasoline Yield—Arch L. Foster	5- 4	43
Three Fluid Catalytic Cracking Units Form the Heart of New Refinery—G. L. Mateer and J. D. Haney	7- 8	91
Catalytic Dehydrogenation of Natural-Gas Hydrocarbons—C. H. Riesz, T. L. Pelican and V. I. Komarewsky	7-15	67
Mid-Continent Refiners Reappraising Postwar Position of Catalytic Cracking—Arch L. Foster	9- 2	30
Texas Co. Completes $21,000,000 Plant at Los Angeles Refinery	9- 9	39
Catalytic Cracking of Cuts From Coastal Crude Oil—(Abs.)—D. B. Arder, R. H. Newton, and G. L. Barcus	9-16	96
Pilot-Plant Development of the Fluid Catalytic-Cracking Process—(Abs.)—L. E. Carlsmith and F. B. Johnson	9-16	97
Production of Isoparaffin Hydrocarbons by Cracking of Petroleum Fractions in Presence of Aluminum Chloride—(Abs.)—V. I. Komarewsky and Lee Warson	9-16	97
Catalytic Cracking and the Small Refiner—W. L. Nelson	10- 7	66
Paulsboro T.C.C. Unit Features Solid Catalyst Bed—J. P. O'Donnell	11-11	82
Butane Dehydrogenation by the Houdry Process—R. C. Lassiat and F. D. Parker	11-18	229
Catalytic Cracking Economically Practicable, Engineers are Told—Arch L. Foster	12- 2	46
Largest U.S. Refinery Incorporates Many War Operations	12-16	73
CRACKING, THERMAL—		
Cracking of Latin American Crude Oils—Dr. Gustav Egloff	6-24	74
Cracking of Latin American Crude Oils—Dr. Gustav Egloff	7- 1	64
Thermal Reforming for Olefin Production—Dr. Gustav Egloff	7-29	197
Cracking of Latin American Crude Oils—Dr. Gustav Egloff	8-12	76
Cracking of Latin American Crude Oils—Dr. Gustav Egloff	9- 9	73
U.O.P. Reduces Royalty to 3 Cents a Barrel	11- 4	46
Cracking of Latin American Crude Oils—Dr. Gustav Egloff	11-18	218
Cracking of Latin American Crude Oils—6—Reforming Mexican Gasolines and Naphthas	12- 9	76
CRUDES, GENERAL—		
District 2 Refiners Propose Ways to Augment Inherent Supplies	1-13	24
Twenty-Three Refiners to Share 64,690 Bbl. of Crude Oil Daily	1-13	32
Cracking of Latin American Crude Oils—1—Eastern Venezuela—Dr. Gustav Egloff	6-24	74
Cracking of Latin American Crude Oils—2—Western Venezuela—Dr. Gustav Egloff	7- 1	64
Cracking of Latin American Crude Oils—3—Colon (Venezuela)—Dr. Gustav Egloff	8-12	76
Cracking of Latin American Crude Oils—4—Cumarebo (Venezuela)—Dr. Gustav Egloff	9- 9	73
Determination of Basic Nitrogen in Hydrocarbon Feed Stocks—(Abs.)—Leon Donn and Harry Levin	9-16	97
Intermediate of Mixed-Base Crude Oils	9-16	117
Black-Oil Producers See Early Solution to Marketing Problem	9-30	52
Paraffin-Base Crude Oils	9-30	111
Processing of West Texas Sour Crudes at Shell's Wood River Refinery—L. R. Gray	10- 7	73
Processing of West Texas Sour Crudes at Shell's Wood River Refinery—L. R. Gray	10-14	98
Naphthenic Crude Oils	10-14	113
Aromatic-Base Crude Oils	10-28	101
Comparison of Crude Oils	12- 2	91
Cracking of Latin American Crude Oils—6—Reforming Mexican Gasolines and Naphthas	12- 9	76
CRUDES, SOUR—		
Improved Refining of Sour Crudes by New Tannin Solutizer Process—H. N. La Croix	2-10	50
Processing of West Texas Sour Crudes at Shell's Wood River Refinery—L. R. Gray	10- 7	73
Processing of West Texas Sour Crudes at Shell's Wood River Refinery—L. R. Gray	10-14	98
Hazards and Corrosion With Sour Crudes	12-16	107
DIESEL FUELS (see Fuels)—		
DISTILLATION (also see Fractionation)—		
Pipe Still Processes More Than Ten Million Barrels in Single Run—John P. O'Donnell	3-23	111

	Date	Page
Toluene Recovery Plant Employs Azeotropic Distillation—Arch L. Foster	4-13	130
Thermal Processing Units Have Combined Capacity of 127,500 Barrels Per Day—W. T. Cravens and B. H. Mylius	7- 8	98
Two Crudes Processed Separately in Double-Coil Unit—R. B. Tuttle	8-26	115
Topping-Plant Flow	11-25	103
Reclaimed Material Used to Build Efficient Rerun Unit—R. B. Tuttle	12-16	92
ECONOMICS (for articles of general nature, see heading under Economics)—		
Midwest Refiners Ask Removal of Freight-Reimbursement Limitations	1-20	21
Amendment Qualifies All District 2 Refiners for Tank-Car Reimbursement	1-27	103
Mid-Continent Refiners' Crude Supply Critical; Sour Oils No Solution—Arch L. Foster	3- 9	32
Pullman Interests Purchase M. W. Kellogg Co.	12-30	166
ELECTRICAL (also see other headings)—		
Design of Electrical Circuits for Low-Voltage Protection in Start Button Control Hook-Up—L. E. Markle	5- 4	76
EQUIPMENT (see headings of specific uses)		
FABRICATION—		
Pipe Caps Made in Refinery Shop	1- 6	41
Reclaimed Material Used to Build Efficient Rerun Unit—R. B. Tuttle	12-16	92
FEED STOCKS (see Crudes)—		
FRACTIONATION (also see Distillation; Plants)—		
A Universal Pressure Rectifying Column—(Abs.)—Edgar S. Byron, John H. Bowman and James Coull	9-16	95
Laboratory Fractionation at Atmospheric Pressure of Normally Liquid Hydrocarbons—(Abs.)—H. J. Hepp and D. E. Smith	9-16	95
Salvaged O.D. Pipe Makes Column—R. B. Tuttle	12-23	88
FISHER-TROPSCH (see Synthesis)—		
FRONT LINES IN REFINING (A Series)—		
Front Lines in Refining—Jan. 6, Jan. 20, Mar. 9, Apr. 6, May 11, May 18, June 10, June 17, Aug. 12, Oct. 7, Nov. 25, Dec. 16.		
FUELS; AVIATION (also see Cracking)—		
Latest Addition to Sun Refinery Greatly Swells 100-Octane Output—J. P. O'Donnell	2- 3	68
Houdry Unit Specifically Designed to Treat Aviation-Gasoline Base Stock—John R. Bates	2- 3	75
Shell-Developed Cumene Process Has Speeded Aircraft-Fuel Program—John P. O'Donnell	2-24	73
Technical Progress Lauded at Pan American Dedication	3-16	50
Technology's Part in the Aviation Gasoline Program—Robert G. Cragin	4-13	142
Allies' Aviation-Fuel Needs Supplied by More Than 170 Units	4-13	157
N.G.A.A. War Products and Postwar Planning Conference (Abs.)	4-13	281
100-Octane Fuel Output Totals 400,000 Bbl. Daily	5- 4	28
Shell's Wood River Plant Exemplifies Progress in 100-Octane Manufacture—John P. O'Donnell	5- 4	33
Fletcher Oil Co. Converts Polymerization Plant to Depropanizer	5-11	122
Cities Service Dedicates War Plant—Arch L. Foster	6- 3	33
Continental Oil's 100-Octane Plant Is Complete, Self-Contained Unit	6- 3	43
Mohawk Converts Refinery Streams Into Aviation Alkylate	6-10	91
Republic Dedicates New 100-Octane Plant in Texas (Davies Reveals National Production of Aviation Fuel Nearly 500,000 Bbl. Daily)	6-24	58
Refiners Pledge Maximum Aviation Gasoline Production	7- 8	38
Standard of Ohio Dedicates New Aviation-Gasoline Plant	7-22	36
Champlin Aviation-Fuel Plant Exceeding Designed Alkylate Capacity—Arch L. Foster and R. B. Tuttle	8- 5	67
New Plant Combines Refining, Natural Gasoline and Pressure Maintenance	8-12	63
Powerful Aviation Fuel Announced by PIWC	8-19	74
Root Petroleum Co. Making More Alkylate Than Plant Was Designed For—Arch L. Foster	8-19	75
Texas Co. Completes $21,000,000 Plant at Los Angeles Refinery	9- 9	39
Jap Aviation-Fuel Operations Traced	9-16	71
Research Council Honored With Army Ordnance Service Award—Arch L. Foster	9-30	62
Aviation-Gasoline Capacity Adequate	10-14	68
"Superfuel" for Fighting Planes Ready for Use	10-21	84
Additions to Richfield's Watson Refinery Nearly Double Aviation-Gasoline Output — Charles C. Day, Jr.	10-21	110
Associated Refinery Draws Charge Stocks From Eight Different Refineries—R. B. Tuttle and Arch L. Foster	10-21	114
Underground Reinforced Concrete Tank for Aviation-Gasoline Storage—George P. Collier	10-28	66
Military Demands for Gasoline Increase 433 Per Cent Since 1941	12- 2	39
Construction Work Progressing Rapidly on Mexico's 100-Octane Refinery	12-30	158
FUELS; DIESEL—		
Diesel Engineers and Refiners Discuss Mutual Problems—(S.A.E.)—Arch L. Foster	5-25	74
Outlook for Postwar Diesel Fuels—Arch L. Foster	5-25	93
Bureau of Ships Investigates New Super Diesel Fuel	8-12	59
Diesel Power High in Postwar Outlook, Automotive Leader Says	10-14	70
FUELS; GENERAL (also see Cracking)—		
Long Range Forecast of Motor-Gasoline Development—D. P. Barnard and R. R. Marschner	1-27	257
Demand for 850 Million Barrels of Gasoline Per Year Predicted by 1950—John P. O'Donnell	3- 2	36
Synthetic-Fuel Bill Sent to White House	4- 6	30
Combustible Gases as Substitute Motor Fuels (Abs.)—Gustav Egloff and Mary Alexander	4-13	124
Future Role of Oil Fuels—Arch L. Foster	4-20	52
Socony-Vacuum Uses Continuous Automatic Lead Blender—J. P. O'Donnell	4-27	43
Synthetic-Fuel Program Launched	6- 3	28
Many Instruments of War Come From Oil Research—Henry D. Ralph	7-15	60
Improvement of Octane Rating of Gasoline by Isomerization—A. V. Frost	7-29	165
Motor-Fuel Demand 17 Per Cent Greater	8- 5	32
Low Octane Rating for Civilian Gasoline Helps War Effort	8-19	70
GREASES (see Lubricants)—		
HEAT EXCHANGE—		
1—Heat Transfer by Conduction—Paul Buthod and B. W. Whiteley	6-17	99
2—Determination of Mean Temperature Difference—Paul Buthod and B. W. Whiteley	6-24	84
3—Practical Heat Transfer Calculations—Paul Buthod and B. W. Whiteley	7- 1	50
4—Heat Transfer Calculations—Paul Buthod and B. W. Whiteley	7-15	105
5—Heat Transfer Film Coefficients—Water Being Heated—Paul Buthod and B. W. Whiteley	7-22	66
6—Heat Transfer Film Coefficient—Water Being Cooled—Paul Buthod and B. W. Whiteley	7-29	197
7—Heat Transfer Film Coefficients—Steam Condensing on Outside of Horizontal Tubes—Paul Buthod and B. W. Whiteley	8- 5	76
8—Heat Transfer Film Coefficients for Steam—Paul Buthod and B. W. Whiteley	8-12	92
9—Heat Transfer Film Coefficients — Petroleum Gases and Vapors—Paul Buthod and B. W. Whiteley	8-19	103
10—Shell-Side Film Coefficients—Paul Buthod and B. W. Whiteley	8-26	129
11—Pressure Drop Through Heat Exchangers—Paul Buthod and B. W. Whiteley	9- 2	56
12—Pressure Loss in Tubes of Heat Exchangers—Paul Buthod and B. W. Whiteley	9- 9	83
13—Pressure Drop—Shell Side of Tubular Heat Exchangers—Paul Buthod and B. W. Whiteley	9-16	91
14—Heat Balances—Paul Buthod and B. W. Whiteley	9-23	289
15—Fouling Resistances—Paul Buthod and B. W. Whiteley	10- 7	84
16—Economic Approach Temperature—Paul Buthod and B. W. Whiteley	10-14	110
17—Factors in Design and Operation of Heat Exchangers—Paul Buthod and B. W. Whiteley	10-21	135
HYDROGENATION—		
Quantitative Liquid-Phase Hydrogenation of Hydrocarbons — (Abs.) — Milton Orchin and E. H. Kaplan	4-13	124
HYDROGEN FLUORIDE (see Catalysis)—		
INSTRUMENTATION—		
Dynagraph Controller Does Work of Three	2-17	71
A Look Ahead—To the Future of Instrumentation in Refining—K. R. Knoblauch	4-13	247
Pneumatic-Set Controller Gives Automatic Process Adjustment	4-13	257
The Basic Gas-Turbine Plant and Some of Its Variants—Kenneth Salisbury	5-18	59
The Basic Gas-Turbine Plant and Some of Its Variants—Part 2—Kenneth Salisbury	5-25	101

	Date	Page
Nearly 1,600 Instruments Installed in Basic Refinery and Butadiene Plant—E. D. Mattix and R. W. Groendycke	7- 8	105
Power, Steam Generation and Distribution Systems at Lake Charles Refinery—A. H. Heitzler	7- 8	115
Alarm System Float Switch	12- 9	97
ISOMERIZATION—		
Alkylation and Isomerization Facilities for 9,500 Barrels Per Day Are Provided—Frank Poole and G. H. Branscombe	7- 8	92
Improvement of Octane Rating of Gasoline by Isomerization—A. V. Frost	7-29	165
Investigation of the Mechanism of Butane Isomerization Using Radioactive Hydrogen as a Tracer—(Abs.)—T. M. Powell and E. B. Reid	9-16	95
The Commercial Isomerization of Lighter Paraffins—B. L. Evering, N. Fragen and G. S. Weems	10-28	77
LABORATORY (also see Analysis; Testing)—		
Ample Laboratory Facilities and Personnel Assure Efficient Control of Processes—J. Bennett Hill	2- 3	92
Scale Models Speed Fluid Catalyst Cracking Units—Joseph F. Skelly	4-12	169
Chemical Laboratory Equipped for Control and Experimental Operations—W. W. Scheumann and J. W. Griswold	7- 8	95
Technical Groups Supervise Process Control at Jersey's Refineries—R. S. Piroomov	9- 2	53
Laboratory Fractionation at Atmospheric Pressure of Normally Liquid Hydrocarbons—(Abs.)—H. J. Hepp and D. E. Smith	9-16	95
Pilot-Plant Development of the Fluid Catalytic-Cracking Process—(Abs.)—L. E. Carlsmith and F. B. Johnson	9-16	97
Factors in Design of Research Laboratory—Charles Haines	11-18	202
Laboratory Crude Distillation	12-30	277
LIQUEFIED PETROLEUM GASES (also see heading under Natural Gasoline)—		
Economy of Crude, Efficiency of Refining Processes Keynote of Postwar Industry—Arch L. Foster	4-13	189
Operation of the Central Gas Plant at the General Petroleum Refinery—Randall Maass	9- 9	59
Wilshire Concentrates Refinery and Stabilizer Gases	10-21	109
LUBRICANTS; LUBRICATION—		
Asphaltization Tests for Lubricating Oil—J. Faust	1-20	29
Solvents Carry the Load in Quaker State's New Lubricating Oil Plant—Emil E. Ebner and F. T. Mertens	4-13	173
Laboratory Evaluation of Some Factors Causing Lubricating Oil Deterioration in Engines—R. E. Burk, E. C. Hughes, W. E. Scovill and J. D. Bartleson	9-16	95
Grease Testing and Applications Subjects at N.L.G.I. Meeting	11- 4	48
New Lube Plant Uses Duo-Sol Extraction, Benzol-Ketone Dewaxing Processes—Arch L. Foster	11- 4	62
Field Tests Are Necessary to Evaluate Lubricating Oils—V. A. Kalichevsky and F. C. Savage	11-11	77
Properties and Performance of New Lube Oils Are Considered—(Abs.)—R. B. Tuttle	11-18	197
Separability Characteristics of Lubricating Greases—T. G. Roehner and R. C. Robinson	11-25	76
Largest U. S. Refinery Incorporates Many War Operations	12-16	72
MAINTENANCE—		
McKnight Clamp Is Emergency Leak Stopper	1-13	60
Methods and Materials That Have Been Developed for Effective, Safe Cleaning—Dr. R. W. Mitchell	2-10	70
Methods and Materials That Have Been Developed for Effective, Safe Cleaning—Dr. R. W. Mitchell	2-17	65
Shell and Tube Condensers Built to Be Cleaned During Operation	2-17	70
Method Devised for Flanging Steel Sheets in Refinery Boiler Shop	3- 2	75
A "Critical Material" for Refineries—H. E. Dralle	6-10	69
Reconditioning Process Renews Gate Valves in Refineries	7-15	87
Jersey's Preventive Maintenance Course Is Highly Successful—J. P. O'Donnell	7-22	48
Portable Maintenance and Repair Units Prove Worth—R. B. Tuttle	11- 4	55
METALLURGY—		
Progress in Metals—W. L. Nelson—Jan. 13, Feb. 10, Mar. 9, April 13, May 11, June 3, June 24, July 22, Aug. 12, Sept. 9, Oct. 21, Nov. 11, Dec. 2.		
NOTEBOOK, REFINERS (A Series)—		
Storage of Feedstocks	7-22	53
Evaporation Losses	7-29	195
Stabilization and Gas Recovery	8- 5	75
Fixed Roof Tanks	8-12	101
Eliminating Vapor Space in Storage Tanks	8-19	110
Gas-Holder Systems	8-26	125
Volatile-Liquids Storage	9- 2	61
Strength of Tanks and Heads	9- 9	98
Intermediate of Mixed-Base Crude Oils	9-16	117
Strapping of Tanks	9-23	293
Paraffin-Base Crude Oils	9-30	111
Heating Coils for Tanks	10- 7	103
Naphthenic Crude Oils	10-14	113
Tank Foundations and Auxiliaries	10-21	137
Aromatic-Base Crude Oils	10-28	101
Corrosion Protection of Tanks	11- 4	75
Sulfur in Oils	11-11	107
Vent Lines—Vapor Handling	11-18	247
Topping-Plant Flow	11-25	103
Comparison of Crude Oils	12- 2	91
Standard Diagram Symbols	12- 9	101
Hazards and Corrosion With Sour Crudes	12-16	107
Combination Topping Plants	12-23	101
Laboratory Crude Distillation	12-30	277
PATENTS—		
Present Patent System Defended at Industrial Research Forum—N. O. Fanning	10-14	73
Decree Modified Against Jersey Company	12- 9	63
PILOT PLANTS (see Laboratory)—		
PLANTS, GENERAL—		
Front Lines in Refining—Arch L. Foster	1- 6	55
Front Lines in Refining—Arch L. Foster	1-20	44
Refining on the March	1-27	114
Completion of (SUN'S) 15 Plant Marks Fulfillment of Pearl Harbor Pledge—J. Howard Pew	2- 3	66
Sun's Marcus Hook Refinery is one of World's Ten Largest	2- 3	67
Union Oil Co. of California Plans and Institutes New Cooperative Methods of Training and Upgrading Refinery Employes—James E. Hill	3- 9	45
British American Refinery at Clarkson Embodies Latest Design Developments—John P. O'Donnell	3-30	64
How One Company's Whole Refining Capacity Was Turned to War	4-13	185
Economy of Crude, Efficiency of Refining Processes Keynote of Postwar Industry—Arch L. Foster	4-13	189
New Cities Service Plant Is "The Refinery of Tomorrow"—Arch L. Foster	7- 8	84
New Plant Combines Refining, Natural Gasoline and Pressure Maintenance	8-12	63
Front Lines in Refining—Arch L. Foster	8-12	69
Technical Groups Supervise Process Control at Jersey's Refineries—R. S. Piroomov	9- 2	53
Texas Co. Completes $21,000,000 Plant at Los Angeles Refinery	9- 9	39
Rapid Expansion of Cooperatives Credited to Favored Tax Position	9-16	65
Important Changes Introduced in Lines for Heavy Oils—Fritz Karge	9-23	244
Plans Under Way to Rehabilitate Allied Oil Properties in Romania—Henry D. Ralph	10- 7	50
General Pattern Outlined for Disposition of Oil War Plants	10- 7	54
Front Lines in Refining—Arch L. Foster	10- 7	81
$352,000,000 Refinery Construction Program Outlined	10-14	70
PLASTICS (see Synthesis)—		
POLYMERIZATION—		
Reforming and Polymerization Are Major Tools for Postwar Refining—R. P. Mase and M. C. Turner	4-13	204
Fletcher Oil Co. Converts Polymerization Plant to Depropanizer	5-11	122
POST WAR (see articles under specific headings in Refining and also Economics)—		
POWER PLANTS—		
Dynagraph Controller Does Work of Three	2-17	71
REFRIGERATION—		
Propane Refrigeration for Alkylation Units	4-13	128
RESEARCH (see specific headings)—		
RUBBER, SYNTHETIC (also see Butadiene; Butylenes)—		
Petroleum Butadiene Is Economically Competitive With Natural Rubber	2-24	63
Sarnia Plant Is Complete Rubber Factory, With Capacity of 38,000 Tons Annually—Arch L. Foster	3-16	63
Synthetic-Rubber Plan to Suffer Unless Engineers Are Spared by Military—Henry D. Ralph	3-23	63
California's Synthetic-Rubber Project Is Now in Full Operation—L. P. Stockman	4-27	34
Butadiene Plant Has Capacity of 55,000 Short Tons Per Year—W. A. Burhouse and Dr. R. McKinney	7- 8	119
Three Nations Confer on Rubber Problems	8-19	67
Outlook Bright for Keeping Oil's Place in Rubber Production	9-16	63
Synthetic Rubber at 10.7 Cents Is Forecast at Chemists' Meeting—Arch L. Foster	11-25	53

	Date	Page
SAFETY—		
Off-the-Job Safety Stressed at Petroleum Section Meeting of NSC	4- 6	30
Long-Term Planning and Plant-Wide Cooperation Established Safety Record—Paul C. Shea	1- 6	42
Safety, Guard, and Fire Departments Work at Units in Plant Protection—J. B. De Laune	7- 8	127
Jersey's Preventive Maintenance Course Is Highly Successful—John P. O'Donnell	7-22	48
Accident Rate at Wood River Refinery Lowered Despite Increased War Construction—J. F. Goldsberry	9- 9	80
Evaluation of Plant "Fire-Control Index"—R. L. Davis	12- 2	67
SALVAGE—		
Reconditioning Process Renews Gate Valves in Refineries	7-15	87
Salvaged O.D. Pipe Makes Pipe Column—R. B. Tuttle	12-23	88
SOUR CRUDE (see Crudes)—		
SOLVENT REFINING (also see Lubricants)—		
Selectivity of Solvents for Various Types of Hydrocarbons as Measured by Critical Solution Temperature—(Abs.)—Alfred W. Francis	4-13	124
STORAGE—		
Petroleum Conservation Demands Modern Storage Equipment—F. L. Goldsby	4-13	220
Piston-Balloon Vapor Unit Saves $16,000 Annually—R. B. Tuttle	6-17	113
Storage of Feedstocks	7-22	53
Evaporation Losses	7-29	195
Stabilization and Gas Recovery	8- 5	75
Fixed Roof Tanks	8-12	101
Eliminating Vapor Space in Storage Tanks	8-19	110
Gas-Holder Systems	8-26	125
Volatile-Liquids Storage	9- 2	61
Strength of Tanks and Heads	9- 9	95
Flame Priming Storage Tanks	9-23	259
Strapping of Tanks	9-23	293
Heating Coils for Tanks	10- 7	103
Tank Foundations and Auxiliaries	10-21	137
Underground Reinforced Concrete Tank for Aviation-Gasoline Storage—George P. Collier	10-28	66
Vent Lines—Vapor Handling	11-18	247
SYNTHESIS—		
"Grain" Alcohol From Cracked Hydrocarbon Gases—Arch L. Foster	1- 6	39
Plastics From Petroleum Hydrocarbons Have Had Spectacular Growth—Arch L. Foster	6-10	55
Questions on Technology (Fischer-Tropsch Process for Natural Gas)—W. L. Nelson	7-29	189
Technical Literature	8- 5	50
Fischer-Tropsch Synthesis May Prove a Major Refining Process—Part 1—The Reaction, Its Mechanism, and Its Products—Arch L. Foster	8-19	99
Fischer-Tropsch Synthesis May Prove a Major Refining Process—Part 2—Methods of Operation—Arch L. Foster	9- 2	46
Fischer-Tropsch Synthesis May Prove a Major Refining Process—Part 3—Catalysts and Their Preparation—Arch L. Foster	9- 9	66
Fischer-Tropsch Synthesis and the Gas Industry—(Abs.)—V. I. Komarewsky and C. H. Reisz	9-16	95
SULFUR (also see Crudes, Sour)—		
Acid Treating at Low Temperature Solves Many High-Sulfur Fuel Problems—J. A. Altshuler	4-13	137
Committee D-2 on Petroleum Products Holds Symposium on Sulfur Determination	5- 4	64
TECHNOLOGY, Questions on—		
Questions on Technology—Jan. 6, Jan. 20, Jan. 27, Feb. 3, Feb. 17, Feb. 24, Mar. 2, Mar 16, Mar. 23, Mar. 30, Apr. 6, Apr. 20, Apr. 27, May 4, May 18, May 25, June 10, June 17, July 1, July 8, July 15, July 29, Aug. 5, Aug. 19, Aug. 26, Sept. 2, Sept. 30, Oct. 7, Oct. 28, Nov. 4, Nov. 18, Nov. 25, Dec. 9, Dec. 16, Dec. 30.		
TESTING (also see Analysis; Laboratory)—		
Committee D-2 on Petroleum Products Holds Symposium on Sulfur Determination	5- 4	64
Laboratory Evaluation of Some Factors Causing Lubricating Oil Deterioration in Engines—(Abs.)—R. E. Burk, E. C. Hughes, W. E. Scovill and J. D. Bartleson	9-16	95
Quartermaster School Supplies Army With Technicians—H. Stanley Norman	9-30	58
Grease Testing and Applications Subjects at N.L.G.I. Meeting	11- 4	48
TETRAETHYL LEAD (see Fuels; Blending)—		
TREATING (also see Crudes, Sour)—		
Soda-Methanol Reagent Removes Mercaptans Quantitatively at Big West Oil Co.—F. C. Moriarty	3-30	82
Mercapsol Process for Gasoline Treating—B. L. MacKusick and H. A. Alves	4-13	126
Acid Treating at Low Temperature Solves Many High-Sulfur Fuel Problems—J. A. Altshuler	4-13	137
Liquid Hydrocarbon Treating With Aqueous Amine Solutions—J. D. Gordon	4-13	202
Low-Cost H_2S Extraction and Mercaptans Reduction	5-25	80
Tannin Solutionizer Process Practically Automatic; Saves 6.5 Cents Per Barrel—John P. O'Donnell	7- 1	45
Eight Different Fractions Are Treated Chemically in Five Separate Units—W. H. Price and T. G. Gray	7- 8	110
WATER—		
Water Purification Processes Adaptable to Changing River Conditions—Orin M. Elliott	2- 3	103
Water Systems at Plant Supply Steam, Process, and Personnel Requirements—E. H. Roy	7- 8	124
WELDING—		
Welding of Refinery Tubes Involves Complicated and Exact Technique—J. Fred Keeler	4-13	162
Arc Welder in the Die Shop—Ingram V. Stovern	5-25	81
Arc-Welded Lines in Oil and Gas Systems—C. M. Taylor	9-23	260

Pipe Line

	Date	Page
COMMUNICATION—		
A Telephone Dispatching Circuit for the Big-Inch Pipe Lines—R. W. Perkinpine	8-26	91
Underground Cable Provides for Communication Along Pipe Lines—Emmett Wilson	9-23	243
CONSTRUCTION—		
Experience in Laying WEP Lines Over Varied Terrain—Paul Reed	3- 2	52
New Construction Methods Developed for Laying Big Pipe—Paul Reed	9-23	150
Shortages Force Station Designers to Employ Ingenuity in Construction—Lewis F. Scherer	9-23	165
Inside Line-up Clamp for Large Diameter Pipe	9-23	221
Flame Priming Storage Tanks	9-23	259
Pressure Welding Applications Increase—A. L. Forbes, Jr.	9-23	263
Arc Welded Lines in Oil and Gas Systems—C. M. Taylor	9-23	260
Modern Big-Inch Construction Practices Applied to Tennessee Line—Paul Reed	11- 4	115
CRUDE-OIL LINE OPERATION—		
Light-Weight, Bolted-Coupling Construction Tested by Stanolind—Paul Reed	3- 9	53
Some Operating Features of WEP Big-Inch Lines—Paul Reed	3-16	78
Operation and Maintenance of a Crude-Oil Pipe Line Without Spare Units—John G. Norton	5-11	127
Turbochargers Help Greatly in Boosting Horsepower at Pipe-Line Pumping Stations—F. W. Cook	9- 2	37
Trend in Pipe-Line Practices—William G. Heltzel	9-23	154
Atmospheric Temperatures on Portland Line Vary 152° F.—J. L. Creed	9-23	183
Diesel Engine Automatic Speed Control Experience—J. E. O'Riordan	9-23	219
Trend in Pipe-Line Practices—William G. Heltzel	9-30	91
Design of Stanolind's Elk Basin—Casper, Wyo., Crude-Oil Pipe Line—Paul Reed	12-23	82

	Date	Page
MAINTENANCE AND PROTECTION (Line)—		
Some Maintenance Features of a 22-In. Transmission Line—(Abs.)—W. K. Borland, A. W. Somerville and D. H. Graham	5-18	76
Interior Cleaning of Natural Gas Pipe Lines—(Abs.)—D. K. Stephens	5-18	76
Maintaining South Louisiana Gas Lines—(Abs.)—E. R. Cunningham	5-18	76
Cathodic Protection, Its Application to a Pipe Line—L. C. Secrest	5-25	82
More Pipe-Line Maintenance—Pressing Management Problem—H. H. Anderson	9-23	200
Thirteen Years of Corrosion Mitigation—O. C. Roddey and Lyle B. Sheppard	9-23	210
Modern Methods of Reconditioning Large-Diameter Pipe—R. W. Todd and A. B. Polley	10-14	79
MAINTENANCE (Station)—		
Operation and Maintenance of Crude-Oil Pipe Line Without Spare Units—John G. Norton	5-11	127
Methods and Equipment for Wartime Pump Station Maintenance—J. Delbert Jones	9-23	152
Wrecked Diesel Pipe Line Engine Restored to Service Without Welding—A. W. Frey	12-16	70
NATURAL GAS OPERATIONS—		
Considerations Involving Performance of Gas Compressors at High Altitude (Abs.)—G. F. Brunston	5-18	54
Transmission Line Experience in Appalachian Region—J. A. Clark and G. W. McKinley	5-18	69
Compressor-Station Design for Long-Distance Natural-Gas Transmission Systems—M. C. Madsen	5-18	71
Alignment Chart for Orifice Meter Calculations for Gas Pipe Line	7-22	71
Automatic-Control Installations for Natural-Gas Pipe-Line Systems—Earl Kightlinger	9-23	157
Iron Oxide Versus Liquid Treating for Purifying Natural Gas—Charles F. Turner	9-23	191
Cavitation as a Possible Cause of Internal Corrosion—D. T. McRoberts	9-23	239
Cause of Explosion at Liquefied Gas Plant Still Not Determined	10-28	58
Seven Compressor Stations Spaced According to Best Pipe-Line Economics (Tennessee Gas & Transmission Co.)—Harold F. Dawe and Henry N. Wade	11- 4	101
Engineering Design of System Result of Detailed and Accurate Calculations (Tennessee Gas & Transmission Co.)	11- 4	105
Double-Flow Horizontal Induced-Draft Cooling Towers Installed at Stations (Tennessee Gas & Transmission Co.)	11- 4	110
Design Features of Compressor Stations of Tennessee Natural Gas Line—Harold F. Dawe and Henry N. Wade	11-11	100
Design of the Dehydration Plant for the Tennessee Natural Gas Pipe Line—Harold F. Dawe and Henry N. Wade	11-25	68
PIPE-LINE PERSONALITIES (Biographical Sketches)—		
J. R. Horrigan	5- 6	84
Charles E. Chamness	7-29	207
Fred H. Warren	8-26	140
John W. de Groot	11-11	120
Herbert S. Austin	12-30	286
PIPE-LINE PERSONNEL—		
Jersey Affiliates Combine Pipe-Line Operations Under Finney	12-23	60
Carefully Selected Organization Steers Tennessee Gas Line to Successful Completion	11- 4	100
PRACTICAL SUGGESTIONS—		
Trees Station, Arkansas Louisiana Gas Co.	1- 6	53
Miscellaneous Suggestions ..2-17 62; 2-24 91; 6-10 76; 9-23 161; 9-23 217;	9-23	229
PRODUCT LINE OPERATIONS—		
Some Operating Features of WEP Big-Inch Lines—Paul Reed	3-16	70
Protecting Pumping Equipment From Fire Damage—C. M. Rosebrugh	9-23	156
Operation of Partial Loops—F. B. Neptune	9-23	204
Station Instrumentation and Control "Nerve Center" of Pipe Line Operation—Merritt A. Hyde	9-23	251
Automatic Protection in the Pumping Stations of the WEP Projects—W. G. Taylor	9-23	255
Devices of Bayou Products Pipe Line (Special Operating Practices at Stations)—Paul Reed	11-18	210
PROJECTS (Arabian)—		
Government Becomes Transportation Arbiter for Middle East Fields—Henry D. Ralph	2-10	28
Middle East Pipe Line Proposal May Upset Entire Petroleum Industry—Charles J. Deegan	2-24	58
President of I.P.A.A. Denounces Arabian Pipe-Line Project	2-24	62
Opposition to Arabian Line May Hasten Formation of Oil Policy—Henry D. Ralph	3- 9	30
Advocates of Arabian Line Race Against Time to to Beat Threatened Interferences—Henry D. Ralph	3-16	52
Opposing Views on Arabian Pipe Line Still Rampant as Neither Side Scores Victory	3-23	26
Moore Wins Audience Victory in Debate on Arabian Pipe Line	3-23	62
Arabian Line Sound Venture, Texas Co. Head Asserts	4-27	28
Collier Endorses Arabian Line	5-11	100
Common Carriers May End Middle East Muddle—John O'Donnell	5-11	100
Ickes Certain of Arabian Line Being Built Despite Opposition	12- 2	44
Arabian Line Is a Practicable Postwar Project—Paul Reed	12-30	164
PROJECTS (Latin American and Canadian)—		
War Department Refuses Comment and PAW Denies Knowledge of Mexican Line	3- 2	38
Colombia's Casabe Field to Gain Pipe Line Outlet Early Next Year	6-24	61
Canol: An Engineering Project From Road Building to Completed Refinery—L. P. Stockman	9-30	65
Oil Transportation Highly Developed in Venezuela	12-30	201
PROJECTS (U.S.)—		
Revamped Transportation System in Position to Meet Emergency Conditions—Paul Reed	1-27	163
Union Ups Capacity of Santa Maria Pipe Line and Starts Operation of New Plant	6-17	83
Extensive Pipe Line Construction Will Continue in Second Half—Paul Reed	7-29	141
Link Between Pipe Line and Barge Completed; Will Relieve Shortage	8-13	60
Tennessee 1,265-Mile Pipe Line and Stations Approach Completion—Paul Reed	9-23	163
Natural Gas Pipe-Line Construction Overcomes Wartime Material Shortages—Henry D. Ralph	9-23	230
Expanded Pace of Oil Pipe Line Building Is Maintained—Henry D. Ralph	9-23	230
1,000-Mile Texas-California Gas Line to Cost $60,000,000—L. P. Stockman	11-11	73
Pipe Line (Postwar Prospects)	11-18	181
WEP ECONOMICS—		
Possibility of Converting One WEP Line to Gas Service Considered by Industry—Paul Reed	1- 6	22
Conversion of Big-Inch Lines to Gas Advocated by Swensrud	2-24	65
Rigid Rules Established for Disposal of War Pipe Lines—Henry D. Ralph	9- 2	22
Pipe Lines Could Compete With Tankers, Jesse Jones Suggests. (An analysis of operating costs and prospects of WEP lines)	11-18	185

Natural Gas

	Date	Page
ANALYSIS—		
The Spectrometric Analysis of Gases—L. J. Brady	8-12	87
Time-Saving Computing Instruments Designed for Spectroscopic Analysis—T. D. Morgan and F. W. Crawford	8-26	100
A Rapid Test for Isobutane Fractions in Natural-Gasoline-Plant Residue Gases—G. M. Liljenstein and W. M. Schaufelberger	12-16	96
CHEMICALS FROM (also see Synthesis and others under Refining)—		
"Grain" Alcohol From Cracked Hydrocarbon Gases—Arch L. Foster	1- 6	39
Catalytic Dehydrogenation of Natural-Gas Hydrocarbons—C. H. Riesz, T. L. Pelican and V. I. Komarewsky	7-15	67
COMPRESSION (also see headings under Pipe Line)—		
Recovering Residual Gas With a Rotary Compressor	4-20	79
Portable Reciprocating-Type Gas-Compressor Units	4-27	57
Centrifugal Compression of Hydrocarbon Gases—E. O. Bennett	5-11	113
Unit Compressors as Boosters on Low-Pressure Gas Wells—Frank B. Taylor	8-12	71
CONTROL—		
Volume Control and Regulation of High-Pressure Gas—E. H. Short, Jr.	2-10	68
Pressure Control of Gas Well to Supply Field Fuel Demands—Neil Williams	7-22	54
Automatic-Control Installations for Natural-Gas Pipe-Line Systems—Earl Kightlinger	9-23	157
CORROSION (for other articles, see Production, Pipe Line, Refining)—		
Corrosion in High-Pressure Gas-Distillate Wells—Harry F. Simons	1- 6	46
A Study of Corrosion in Gas and Condensate Wells in Katy Field, Texas	5- 4	53
High-Pressure Production Equipment Corrosion—Thomas S. Bacon	6-17	132
Condensate Corrosion Study Launched	8- 5	37
Practical Elimination of Problems in Handling Sour Gas at High Pressures—Frank B. Taylor	8- 5	47
Causative Agents of Corrosion in Distillate Field—Paul L. Menaul	11-11	80
CYCLING (see heading under Production)—		
DEHYDRATION—		
Streamlined Production System—Neil Williams	3- 9	41
Recent Trends in the Dehydration of Natural Gas—(Abs.)—Thomas S. Bacon	5-18	54
Gas Dehydration—(Abs.)—E. G. Hammerschmidt	5-18	76
Dehydration of High-Pressure Gas—(Abs.)—W. F. Fulton	5-18	76
The Equilibrium Water Vapor Content of a Natural Gas—(Abs.)—George F. Russell, Robert Thompson, Frank P. Vance and R. L. Huntington	5-18	79
Design of the Dehydration Plant for the Tennessee Natural-Gas Pipe Line—Harold F. Dawe and Henry N. Wade	11-25	68
DRILLING ACTIVITY (see heading under Economics)—		
ENGINEERING, GENERAL—		
The Drowning and Revival of Gas Wells—S. T. Yuster and K. K. Sonney	4-20	58
The Drowning and Revival of Gas Wells—Part 2—S. T. Yuster and K. K. Sonney	5- 4	63
Commission to Investigate Natural-Gas Reserves	10- 7	59
FISCHER-TROPSCH PROCESS (See Synthesis under Refining)—		
LIQUEFIED PETROLEUM GASES (see heading under Natural Gasoline)—		
MEASUREMENT—		
Standardization of Flow Records by Adoption of the Square-Root Meter Chart—John P. Squier	6-10	63
First-Year Registrants Increase at Gas-Measurement Short Course—R. B. Tuttle	6-17	77
Calculation of Gas Passed in Excess of Orifice-Meter Range—Frank B. Taylor	8-19	81
PIPE LINE (also see headings under Pipe Line)—		
Possibility of Converting One WEP Line to Gas Service Considered by Industry—Paul Reed	1- 6	22
Conversion of Big-Inch Lines to Gas Advocated by Swensrud	2-24	65
Transmission Line Experience in Appalachian Region—J. A. Clark and G. W. McKinley	5-18	69
Compressor-Station Design for Long-Distance Natural-Gas Transmission Systems—M. C. Madsen	5-18	71
Interior Cleaning of Natural Gas Pipe Lines—(Abs.)—D. K. Stephens	5-18	76
Maintaining South Louisiana Gas Lines—(Abs.)—E. R. Cunningham	5-18	76
Automatic-Control Installations for Natural-Gas Pipe-Line Systems—Earl Kightlinger	9-23	157
Tennessee 1,265-Mile Pipe Line and Stations Approach Completion—Paul Reed	9-23	162
Natural-Gas Pipe Line Construction Overcomes Wartime Material Shortages—Henry D. Ralph	9-23	222
1,000-Mile Texas-California Gas Line to Cost $60,000,000—L. P. Stockman	11-11	72
Design of the Dehydration Plant for the Tennessee Natural-Gas Pipe Line—Harold F. Dawe and Henry N. Wade	11-25	68
Memphis Natural Gas Granted Right to Build New Lines	12- 2	43
Exportation of Texas Gas Is Center of Lively Debate	12-30	162
PRODUCTION—		
Natural Gas Continues Increase With Another Demand Record in Prospect	1-27	131
Cycling Has Significant Relation With Natural Gas Operations—R. W. Ducker and F. H. Dotterweich	5-11	107
Treatment of Gas Sands to Prevent or Overcome Detrimental Effect of Water—K. J. Sonney and C. E. Williams	6- 3	51
Pressure Control of Gas Well to Supply Field Fuel Demands—Neil Williams	7-22	54
REGULATION OF PRESSURE (see Control)—		
RESERVES (see heading under Economics)—		
STORAGE—		
Methods of Storing Natural Gas to Relieve Peak Demands on Fields—J. French Robinson	3- 2	56
Underground Storage of Natural Gas—(Abs.)—E. G. Dahlgren	4-20	68
Underground Storage of Natural Gas in the Medina Formations of Western New York—(Abs.)—John Reeves	5-18	53
Michigan Natural Gas Storage Project—(Abs.)	5-18	54
Underground Storage of Natural Gas in LaGoleta Field—(Abs.)—Marion L. Fort	5-18	54
Columbia System's Underground Gas-Storage Operations—(Abs.)—George S. Young and J. E. Overbeck	5-18	54
Natural Gas Underground Storage Northern Pennsylvania—(Abs.)—J. H. Isherwood	5-18	76
TREATING—		
The Story of the McKamie (Ark.) Gas Cleaning Co.—(Abs.)—C. W. Cooper	5-18	53
Practical Elimination of Problems in Handling Sour Gas at High Pressures—Frank B. Taylor	8- 5	47
Iron Oxide Versus Liquid Treating for Purifying Natural Gas—Charles F. Turner	9-23	191

Natural Gasoline

	Date	Page
CORROSION (also see Production; Refining)—		
A Study of Corrosion in Gas and Condensate Wells in Katy Field, Texas	5- 4	53
CYCLING (see heading under Production)—		
ECONOMICS (also see Economics Section)—		
Production of Natural Gasoline and Cycle Products to Rise 27,000 Bbl. Daily—H. Stanley Norman	4-13	121
HEAT EXCHANGE (see heading under Refining)—		
PLANTS, GENERAL—		
Dynagraph Controller Does Work of Three	2-17	71
Distillate Production Corp. of Houston Completes Its New Cycling Plant Designed for Obtaining High Percentage of Propane and Butane—E. H. Short, Jr.	3-16	67

	Date	Page
Louisiana's Output of Cycling Products to Be Doubled by Erath Plant—R. L. Keyes	4-13	295
Conservation in Postwar Era to Change Character of Natural Gasoline Plants—Paul M. Raigorodsky	4-13	300
Many Factors to Consider in Gasoline-Plant Projects—W. F. Matheny	4-27	61
Design and Construction of the Santa Maria Valley Absorption Plant—D. E. McFaddin	7-29	145
Hawkins Plant Recovers Isoparaffin Higher Than 95 Per Cent Purity—H. W. Harts	8- 5	57
New Plant Combines Refining, Natural Gasoline and Pressure Maintenance	8-12	63
Operation of the Central Gas Plant at The General Petroleum Refinery—Randal Maass	9- 9	59
LIQUEFIED PETROLEUM GASES (also see Refining; Natural Gas Sections)—		
Increases in Natural-Gasoline Yield to Continue for Production of War Materials—B. L. Brennan	4-13	282
Liquefying and Storing Natural Gas for Peak Loads—(Abs.)—Charles F. Turner	5-18	54
Operation of the Central Gas Plant at the General Petroleum Refinery—Randall Maass	9- 9	59
Laboratory Fractionation at Atmospheric Pressure of Normally Liquid Hydrocarbons—(Abs.)—H. J. Hepp and D. E. Smith	9-16	95

Exploration

	Date	Page
EXPLORATION, ACTIVITY (also see Drilling Activity under Economics)—		
Journal Introduces New Feature Showing Trend in Completions	1- 6	27
Twenty Parties Assigned to Field Projects in U.S.G.S. Expanded Program	1-20	20
Drilling Activity Shifts to Outlying (Canadian) Areas—Victor Lauriston	1-27	197
Wildcat Drilling Has Failed to Keep Up With Increasing Need of Discoveries—W. V. Howard	2-17	41
Regional Play Extends From Connecticut to Florida	7-22	39
Oil Discovery in United States Stalled by Its Own Success	8-19	67
Exploratory Activity and Oil, Gas Discoveries in California, 1944—Albert I. Gregersen	11-18	193
Sixty-Two Pool Discoveries Are Reported During October	12- 9	58
EXPLORATION, AREAS—		
Drilling Activity Shifts to Outlying (Canadian) Areas—Victor Lauriston	1-27	197
China's Production of 3,000 Bbl. Daily Starts Nation Toward Self-Sufficiency—John P. O'Donnell	2- 9	34
Regional, Subsurface Stratigraphy and Structure of Florida and South Georgia	3-23	92
Geological Developments in the Southeastern Gulf Coastal States—H. R. Brankstone	4-20	40
Methods of Sand Study in the Appalachian Basin (Abs.)—R. E. Sherrill and D. A. Busch	4-20	68
Regional Play Extends From Connecticut to Florida	7-22	39
Possible Future Oil Pools of Pennsylvania—R. E. Sherrill	7-29	129
Geologic Aspects of Wyoming and Outlook for Development—Pierre La Fleiche	8- 5	38
Center of Production Shifting From U. S., Geologists Told—L. P. Stockman	11-18	190
Prospecting in Georgia Active; 9,000,000 Acres Leased—Garland Peyton	12-23	62
Six Wells Drilling in Florida; Five to Go Below 10,000 Ft.—Herman Gunter	12-23	63
1945 Will See Intensified Search for Foreign Reserves—H. Stanley Norman	12-30	159
Possible Oil Area in Alabama Divided Into Two Parts—Stewart J. Lloyd	12-30	167
EXPLORATION, RESULTS—		
Production Hits New Peak, Higher in 1944	1-27	124
Asserted Increase in Number of New Discoveries Offset by Poor Quality—W. V. Howard	3- 2	34
Wildcat Wells 17 Per Cent Successful—Frederic H. Lahee	3-23	69
Northern Ordnance Concludes Spectacular Wildcatting Program	11-11	74
GEOLOGY—		
Outline of Chinese Geology—J. Marvin Weller	3-23	101
Wartime Duties of U.S.G.S. Cover Multiple Services—William E. Wrather	3-23	103
The Radioactivity and Organic Content of Some Paleozoic Shales—Roland F. Beers	3-23	105
Subsurface Correlation by Detailed Electrolog Tabulation—M. M. Kornfeld	3-23	109
Geology and Development of the Norman Wells Oil Field—J. S. Stewart	4-27	136
Geometrical Orientation of Cores—Philip Subkow	6-10	79
The Structure Diorama—Frederick Squires	8-19	86
Formation of Oil	10-14	115
Migration of Oil and Origin of Oil Pools	10-21	139
Practical Geology of Oil: Description of Oil Reserves	10-28	99
Practical Geology of Oil: Migration of Hydrocarbons	11- 4	77
Permeability, Type of Pay, and Interstitial Water—No. 5—Park J. Jones	12- 2	73
Engineering Aspects Connected With Examining Undeveloped Areas and Leases	12- 2	87
Gulf, Mexican and Caribbean Oil Zones—Jurassic	12-30	182
Gulf, Mexican and Caribbean Oil Zones—Cretaceous	12-30	184
Gulf, Mexican and Caribbean Oil Zones—Eocene-Oligocene	12-30	186
Gulf, Mexican and Caribbean Oil Zones—Miocene-Pliocene	12-30	188
South American Oil Zones—Devonian	12-30	190
South American Oil Zones—Permo-Carboniferous	12-30	192
South American Oil Zones—Mesozoic	12-30	194
South American Oil Zones—Eocene-Oligocene	12-30	196
South American Oil Zones—Miocene-Pliocene	12-30	198
GEOPHYSICS—		
Geophysics Looks Forward—R. D. Wyckoff	3-23	85
A new Type of Seismic Cross-Section Wherein Accuracy of Representation Is Rendered Insensitive to Velocity Error—Phil P. Gaby	3-23	105
A Geophysical Survey of Kuwait, Persian Gulf—Paul H. Boots	3-23	105
The Correlation Refraction Method of Seismic Surveying—J. A. Gillin, R. D. Arnett and E. D. Alcock	3-23	106
Effect of Ray Curvature Upon Seismic Interpretations—E. J. Stulken	3-23	109
Estimating Ore Masses in Gravity Prospecting—Sigmund Hammer	3-23	109
Distant Offshore Seismic Survey Conducted in Gulf of Mexico—E. H. Short, Jr.	8-26	87
RESERVES (see heading under Economics)—		

General News, Shaping Industry Policy and Operations

Economics

	Date	Page
DRILLING ACTIVITY—		
Journal Introduces New Feature Showing Trend in Completions	1- 6	27
Greatest Number of Drilling Rigs in History to Operate This Year—Frank A. Watts	1-20	16
Recent Surge in Well Completions Fails to Offset First-Half Decline—(Includes Number of Completions and Footage, by States, and Totals for 1933-1943, Inclusive)—H. Stanley Norman	1-27	126
Average Number of Active Rotary Rigs to Increase 230 in Second Half of This Year	2-10	33
Wildcat Drilling Has Failed to Keep Up With Increasing Need of Discoveries—W. V. Howard	2-17	41
Rotary Drilling Operations Rise But Make Less Footage	4-13	110
Completions Lag 14 Per Cent Behind Quota—Charles J. Deegan	4-13	117
Necessity for Intensifying Drilling Stressed by Producibility Report	7- 8	36
Active Rotary Rigs Rise to 1,658, Highest in History	7-29	123
Drilling Forecast — Sharp Increase Indicated — H. Stanley Norman	7-29	132
Well Completions Increase 30 Per Cent First Half of 1944—Charles J. Deegan	7-29	135
California Drilling Campaign Will Continue Vigorous in Postwar Era—L. P. Stockman	8- 5	32
Contractors Told That Drilling Must Increase—Neil Williams	10-14	66
EDITORIALS—		
Democracy at Work	1- 6	29
Keeping Pace With Refiners	1-13	31
Puncturing Postwar Balloons	1-20	19
Today and Tomorrow	1-27	108
Basis for National Policy	2- 3	25
Dangerous Proposal	2-10	35
Mississippi's Responsibility	2-17	39
In Right Direction	2-24	63
A Realistic Oil Policy	3- 2	33
Postwar Rubber	3- 9	36
Subsidies No Answer	3-16	53
Gasoline Rationing	3-23	61
The Matter of Taxes	3-30	55
Realistic Labor Policy	4- 6	29
Applied Petroleum Science	4-13	119
Anglo-American Plans	4-20	35
Planning Starts at Home	4-27	33
Refinery Horizons Widen	5- 4	35
Competing With Itself	5-11	101
Renew the Offensive	5-18	49
Care in Presentation	5-25	71
Ending Federal Control	6- 3	35
An Important Conference	6-10	51
Petroleum's Fulfillment	6-17	83
Congress Takes a Stand	6-24	59
Over the Hump	7- 1	37
End the Pussyfooting	7- 8	41
Main Problems Continue	7-15	59
A Threat to Independents	7-22	41
Postwar Transportation	7-29	127
In Lieu of Annual Meetings	8- 5	35
Protecting Natural Gas	8-12	57
Workable World Pattern	8-19	71
A Timely Letter	8-26	79
A Pre-Election Handout	9- 2	27
New Demand Data Needed	9- 9	43
Synthetic Rubber	9-16	67
Re: Future Demands	9-23	145
Negation Not Enough	9-30	57
Reconversion—An Industry Problem	10- 7	57
After V-E Day	10-14	69
Importance of Price	10-21	89
The Future Yardstick	10-28	57
Next Tuesday	11- 4	47
Gasoline Taxes	11-11	71
Postelection	11-18	189
Economic Research	11-25	53
Mental Reconversion	12- 2	45
After Three Years	12- 9	57
Clarifying Revisions	12-16	63
Peace and Good Will	12-23	61
A World Challenge	12-30	165

	Date	Page
FOREIGN, GENERAL (also see Anglo-American under Foreign Section)—		
International-Oil Plan Discussed as Reversal of Lend-Lease Operations—Henry D. Ralph	1-13	25
World Oil Policy Inducive to Peace Sought by Jersey Company	1-13	30
Proposed Abolishment of PRC May Throw Foreign Oil Issue Into Politics—Henry D. Ralph	1-27	102
PRC Is Expected to Act Soon on Persian Gulf Petroleum Program—Henry D. Ralph	2- 3	18
Senate Starts Work on Assignment to Develop Policy on Foreign Oil—Henry D. Ralph	2-24	56
Principles in Foreign Oil Policy Dispute Preparing Cases for Inspection of Senate—Henry D. Ralph	3-30	48
Poe Urges Policy of Cooperation Between Industry and Government	4-20	28
International Oil Compact Believed Slated for Consideration at Resources Conference—Henry D. Ralph	4-27	28
Labor Is Key Component in South American Development—H. L. Chapman	5-25	68
British Reaction Awaited Before Resuming Foreign-Oil Discussions	6- 3	29
Socony-Vacuum to Join List of Venezuelan Shipping Companies	6- 3	30
South American Petroleum Institute Plans Postwar Expansion	6-24	62
Independents Warned of Conflict With Foreign-Petroleum Program—Max L. Spray	7- 1	36
Foreign Oil Discussions Resumed	7-29	128
Permanent Committees May Maintain Open-Door Policy in World-Petroleum Affairs — Henry D. Ralph	8- 5	28
Intensified Bombings Cripple Enemy Oil Installations	8-19	70
Pending Oil Treaty Is Blasted as Violent Supererogation of Power	9-23	138
Reverse Lend-Lease in Petroleum Products Mounting	12- 2	42
Middle East Petroleum Reserves Support Huge Expansion Program	12-30	170
Coordinated Utilization of Foreign Oil Has Made Industry's War Record Possible—Ralph K. Davies	12-30	178
Socony-Vacuum Concentrating on Development in Venezuela	12-30	206
Foreign Operations Committee Important Link in Oil-Supply Chain	12-30	220
England's Only Oil Field Is Most Strategically Located Allied Supply	12-30	253
Standard-Vacuum Planning to Restore Far-East Properties	12-30	261
Polish Petroleum Prospects Bright Despite Decline Under Nazi Operation	12-30	264
FOREIGN, TRANSPORTATION—		
Opposition to Arabian Line May Hasten Formation of Oil Policy—Henry D. Ralph	3- 9	30
Advocates of Arabian Line Race Against Time to Beat Threatened Interferences—Henry D. Ralph	3-16	52
Moore Wins Audience Victory in Debate on Arabian Pipe Line	3-23	63
Opposing Views on Arabian Pipe Line Still Rampant as Neither Side Scores Victory	3-25	56
Stimson Puts Support Behind Arabian Line	4- 6	22
Arabian Line Sound Venture, Texas Company Head Asserts	4-27	28
Collier Endorses Arabian Line	5-11	102
Common Carrier Lines May End Middle East Muddle—J. P. O'Donnell	5-11	103
Senate Promised Notification on Arabian Line	6-10	49
Arabian Pipe-Line Project Is Dormant, Possibly Indefinitely—Henry D. Ralph	6-24	54
Colombia's Casabe Field to Gain Pipe-Line Outlet Next Year	6-24	61
Ickes Certain of Arabian Line Being Built, Despite Opposition	12- 2	44
Oil Transportation Highly Developed in Venezuela	12-30	201
GOVERNMENT AGENCIES—		
Office Price Administration—		
OPA Continues Policy of Allowing Modest Rises in Subnormal Fields	1-27	157
OPA Considers Reconversion Pricing Problems for Oil-Field Equipment	3- 9	36
OPA Completes Subsidy Plan, Recommendation Sent Vinson	3-30	58
OPA Criticism Taken to Senate Floor	6-10	44

	Date	Page
OPA Defends Charts on Petroleum Prices	6-10	44
OPA Announces Changes in Ceiling-Price Rules	7-29	131
Final Amendment on OPA Subsidy List	8-12	51
New System of Ration Evidence Established for Federal Agencies	8-12	56
OPA Seeks to Clarify Oil Prices	8-19	73
Series of Practical Problems Besets Operation of Subsidy	9- 9	38
Subsidy May Be Extended to High-Cost Fields Shortly	9-23	138
Outlook Bright for Less Rigid Rationing When Nazis Fall	9-30	54
OPA Details Steps in Qualifying High-Cost Pools for Premium Price	11-11	68
All Subsidy Pools Are Listed	11-11	69
OPA Declares Gasoline Black Market Almost Under Control	12- 2	51
Small-Business Committee Calls for OPA Oil-Price Study	12- 9	56
OPA Appointing Advisory Group to Study Oil-Production Charts	12-23	54
Petroleum Administration for War—		
(PAW Petroleum Administration for War)—		
Operators Told How to Procure Equipment Under Order L-192	1- 6	26
Multizone Completion and Reworking Restrictions in PAO 11 Relaxed by PAW—Henry D. Ralph	1- 6	32
Condensed Directory—PAW Washington and District Offices	1-27	140
Navy Opposes PAW Plea for More Elk Hills Production	2- 3	29
War Department Refuses Comment and PAW Denies Knowledge of Mexico Line	3- 2	32
Industry Urged to Take Steps for Deferment of Key Men Through PAW—Henry D. Ralph	3-30	54
Vinson to Confer With PAW and Industry on Subsidy Proposal	4- 6	23
PAW Hits Assertion That Gasoline Rationing Could Be Liberalized	4- 6	23
PAW Passing on 200 Requests for Deferments Per Day	4-20	36
PAW Praised by House Committee	6- 3	26
PAW Action Awaited on Davies' Pledge to Consider Decentralization of Spacing Controls—E. H. Short, Jr.	6-24	52
PAW Is Urged to Give Production Manpower High Priority Rating	7- 8	36
Revised PAO-11 Meets Requests of Southwestern Operators—Henry D. Ralph	7- 8	42
Peak Output of 4,945,400 Bbl. Daily Certified for August	7-29	128
Texas Seeks Abolishment of Unnecessary PAW Regulations	8-26	72
79 Texas and Louisiana Fields Granted 10-Acre Well Spacing	8-26	73
Industry Asked to Produce Record of 5,051,000 Bbl. Daily	8-26	78
Double Talk Suspected in Plan to Release Controls Over Materials—Henry D. Ralph	9-16	68
PAW Studies Supply and Demand Picture as of V-E Day; Avoids Postwar Planning—Henry D. Ralph	10-21	82
PAW Operating Below Budget	10-21	82
Production Rate for December Raised 2,500 Bbl. by PAW	11-25	49
Adjustments Made to Deliver Oil From South Amerto Canada	12-30	158
Foreign Operations Committee Important Link in Oil-Supply Chain	12-30	220
Petroleum Industry War Council—		
(PIWC Petroleum Industry War Council)—		
PIWC Hears Pessimistic Report on Oil Supplies	2-10	32
PIWC Report Asks Abandonment of PRC	2-10	36
PIWC Members Level Sharp Criticism at PRC Program	3- 2	27
PIWC Reaffirms Stand for General Advance	5-11	97
Powerful Aviation Fuel Announced by PIWC	8-19	74
No Great Reconversion or Job Problems Visualized by Boyd (PIWC)	10-21	83
PIWC Agrees to Further Study of Anglo-American Oil Pact—Henry D. Ralph	11- 4	40
Connally's Stand Puts Another Strike on Anglo-American Pact	12- 9	50
Hardwicke Contends Agreement Does Not Extend Federal Power	12- 9	50
PIWC Approves Redraft of Pending Anglo-American Treaty—Henry D. Ralph	12-16	56
Several Major, Numerous Minor Variations in New Oil Pact	12-16	56
State Department Studying Proposed Oil-Treaty Changes—Henry D. Ralph	12-23	56
War Production Board—		
WPB Permits Manufacture of Light-Weight Tubing	1-27	110
Material-Control Rules Relaxed and Paper Work on Priorities Reduced—Henry D. Ralph	2- 3	26
Suppliers Given Assignment—Frank A. Watts	3-16	54
Petroleum Priority Rules Are Simplified	7- 1	32
New Materials Control Program Would Permit Long-Range Plans	8-12	51
Double Talk Suspected in Plan to Release Controls Over Materials—Henry D. Ralph	9-16	68
First Quarter Steel Allocations Equal Estimated Requirements	12- 9	50
Governmental, General—		
Minimum Wage Rates Established in Oil and Chemical Industries	1-27	110
Permanent Petroleum Policy Expected to Result From Broadened Senate Study—Henry D. Ralph	2-17	32
Renegotiation Based on Tax Reports	3- 2	29
Regulations, General—		
U. S. Representatives Favor Strong Governmental Control	4-20	28
Poe Urges Policy of Cooperation Between Industry and Government	4-20	28
Congress Veers Away From Condemnation of Oil Land—Henry D. Ralph	6-10	46
Last-Minute House Reversal Ends Chances of Oil-Price Bill	6-24	60
Government's Covetous Glances at Oil Reserves Held Alarming—Henry D. Ralph	7- 8	37
Senate Committee Finds Industry Doing Good Job	8- 5	36
Rigid Rules Established for Disposal of War Pipe Lines—Henry D. Ralph	9- 2	22
States Urged to Regain Control of Oil Affairs	10- 7	56
Present Patent System Defended at Industrial Research Forum—N. O. Fanning	10-14	73
Independents Ask Return of Oil Control to States	10-21	90
DPC's Briefalog Leaves Many Important Questions Unanswered—Henry D. Ralph	10-28	80
Enigmas of Wage-Hour Act Clarified by Labor Department	11-11	73
Petroleum Affairs Unchanged in State Department Reorganization—Henry D. Ralph	12-30	160
Interstate Compact—		
States Urged to Prepare for Return of Regulatory Powers—Neil Williams	4- 6	33
Public Domain Problems Discussed at Compact Meeting—T. R. Ingram	7- 8	40
Interstate Oil Compact Group Denounces Proposed Anglo-American Treaty—Charles J. Deegan	10-14	63
Oil Compact to Meet in Jackson, Miss., Foster Assumes Secretaryship	11-25	48
MANPOWER (also see headings under Governmental)—		
Manpower Shortage May Become More Critical, Oil Men Told	1-27	103
Synthetic-Rubber Plan to Suffer Unless Engineers Are Spared by Military—Henry D. Ralph	3-23	62
Interagency Committee to Evolve Deferment Plan for Key Men in Oil Industry—Henry D. Ralph	4- 6	28
Labor Shortage Threatens Further Slowdown—E. H. Short, Jr.	5-11	100
Drain on Technical Manpower Is Growing More Serious, Boyd Says	7- 1	34
PAW Is Urged to Give Production Manpower High Priority Rating	7- 8	36
More Than 1,000 Women Employed at Continental Oil Co. Refinery	9- 9	91
NATURAL GAS—		
Natural Gas Continues Increase With Another Demand Record in Prospect	1-27	131
Freedom of Natural Gas in Interstate Commerce—R. E. Wertz	5-11	109
Exportation of Texas Gas Is Center of Lively Debate	12-30	162
POSTWAR (see Trends, Industry)—		
PRICES—		
OPA Continues Policy of Allowing Modest Rises in Subnormal Fields	1-27	157
Markets Virtually Static	1-27	157
Specific Ceiling Prices Placed on Middle West Products to East Coast	2- 3	30
Pew Refutes Pearson Assertion That Sun Favors Low Crude Price	2-17	37
Price Issue Is Appealed to the President—Charles J. Deegan	3-16	46
Bowles Replies to Zook's Charges	4-27	30
OPA Defends Charts on Petroleum Prices	6-10	44
Last-Ditch Fight Launched to Tack Oil Priority on Price Bill—Henry D. Ralph	6-10	44
House and Senate Conferees Hold Fate of Crude-Price Legislation	6-17	85

	Date	Page
Last-Minute House Reversal Ends Chances of Oil-Price Bill	6-24	60
OPA Announces Changes in Ceiling-Price Rules	7-29	131
OPA Seeks to Clarify Oil Prices	8-19	73
Newly Documented Evidence Supports Higher Oil Prices	9-30	50
Small-Business Committee Calls for OPA Oil-Price Study	12- 9	56
RESERVES—		
Proven Reserves, Total U. S., by Individual States (Compiled by The Oil and Gas Journal)	1-27	116
Reserves and Production, by fields:		
Michigan	1-27	194
Illinois		223
Kansas		232
Nebraska		232
Oklahoma		209
Texas:		
North		214
Eastern		186
West		169
Panhandle		169
Southwest		179
Upper Gulf Coast		227
Lower Gulf Coast		185
Louisiana, Gulf		203
Louisiana, North		243
Arkansas		243
Wyoming		199
Colorado		199
New Mexico		174
California		191
Other States, Totals		117
1943 Discoveries and Extensions (Reserves), by States and Fields (Compiled by The Oil and Gas Journal)	1-27	118
Status of Large Fields Warns of Impending Shortage of Domestic Oil Supply—W. V. Howard	2-10	39
Net Decline of 18.6 Million Barrels Shown in Reserves by A.P.I. Annual Report—John P. O'Donnell	2-24	61
Asserted Increase in Number of New Discoveries Offset by Poor Quality—W. V. Howard	3- 2	34
World Court Judge Blasts Petroleum Reserves Policy—J. P. O'Donnell	5-18	48
Analysis Shows Abundant Reserves Still in Gulf, Mid-Continent Areas—Frank B. Taylor	6-10	53
Standardization in Compiling Data on Exploratory Drilling and Crude-Oil Reserves—(Abs.)—Frederic H. Lahee	6-17	132
Government's Covetous Glances at Oil Reserves Held Alarming—Henry D. Ralph	7- 8	37
Commission to Investigate Natural-Gas Reserves	10- 7	59
World Reserves	11-18	161
1945 Will See Intensified Search for Foreign Reserves—H. Stanley Norman	12-30	159
SUPPLY AND DEMAND (all phases)—		
Modification of Demand Necessary to Stop Drain on California Oil Stock	1-13	24
Production Hits New Peak, Higher in 1944 (Includes Production Statistics by States, for 1937-1943 Inclusive)	1-27	124
World Production Will Set Another Record This Year—J. P. O'Donnell	1-27	143
Enigma of Crude-Oil Supply Only Threat to Industry's War Machinery—Henry D. Ralph	1-27	147
Withdrawals from Major Fields Forced Higher to Supply Growing War Demand—W. V. Howard	2- 3	23
Status of Large Fields Warns of Impending Shortage of Domestic Oil Supply—W. V. Howard	2-10	39
Supply Position on West Coast Continues Critically Serious	2-17	45
Demand for 850 Million Barrels of Gasoline Per Year Predicted by 1950—John P. O'Donnell	3- 2	36
Mid-Continent Refiners' Crude Supply Critical; Sour Oils No Solution—Arch L. Foster	3- 9	32
Manufacturing Rates Rising on Most Critically Needed Petroleum Equipment—Frank A. Watts	3- 9	39
Rising Military Demand Lowers Gasoline Supply Available to Car Owners—Charles J. Deegan	3-23	57
Gasoline Consumption as Related to the Postwar National Economy—R. W. Reinhart	4-13	133
Rise of Oil Requirements to 5,202,000 Bbl. Daily Is Likely	5-11	96
Gasoline Allocated for Third Quarter	6-24	57
Disposal of Surplus Crude Is Immediate Postwar Problem—John P. O'Donnell	7- 1	40
Nation's Fields Producing at Maximum Efficient Rate—Henry D. Ralph	7-29	122
Production Increases 100,742,000 Bbl.—Demand Forces Second-Half Forecast Upward—Charles J. Deegan	7-29	137
Record-Breaking Refinery Requirements Face Industry—H. Stanley Norman	7-29	139
Motor-Fuel Demand 17 Per Cent Greater	8- 5	32
Reduction in Demand, With End of the European War, Is Not Expected to Be Drastic—John P. O'Donnell	8-12	50
Industry Asked to Produce Record of 5,051,000 Bbl. Daily	8-26	78
Swift Return Expected in Rate of Oil-Demand Increase	9-16	60
Demand for All Oils May Total 1,914,000,000 Bbl. in 1944	9-16	64
Rise in Demand Forecast If European War Continues	9-23	139
Civilian Gasoline Supplies Are Near Minimum "Working" Levels	10- 7	52
PAW Studies Supply and Demand Picture as of V-E Day; Avoids Postwar Planning—Henry D. Ralph	10-21	82
World Crude-Oil Supply	11-18	158
Natural Gas Consumption	11-18	162
Demand Misconception Cause of Current Residual Maladjustments—H. Stanley Norman	12- 2	39
Military Demands for Gasoline Increase 433 Per Cent Since 1941	12- 2	39
Military Services Request Increased Oil Supplies	12-16	62
SUBSIDY PAYMENTS—		
Operators to Receive Preview of OPA's Stripper-Well Subsidy Proposal—Henry D. Ralph	3- 2	26
OPA Completes Subsidy Plan, Recommendation Sent to Vinson	3-30	58
Vinson to Confer With PAW and Industry on Subsidy Proposal	4- 6	23
Subsidy Payments for Crude Authorized—Henry D. Ralph	7-15	54
Details Taking Shape for Start of Crude-Oil Subsidy Plan—Henry D. Ralph	7-22	54
DSC Promises to Make Subsidy Payments on OPA-Approved Oil	8- 5	29
Final Amendment on OPA Subsidy List	8-12	51
Regulations on Stripper-Well Adjustments Issued by DSC	8-19	68
Producers Advised to Check State Classification of Subsidy Pools	8-26	72
Series of Practical Problems Besets Operation of Subsidy	9- 9	38
Subsidy May Be Extended to High-Cost Fields Shortly	9-23	138
Agreement Reached on Formula for Giving Subsidy to High-Cost Wells	9-30	55
Low-Gravity Price Ceilings Made Specific for Stripper Operators	10- 7	60
House Committee Urges Oil Price Increase, Stripper-Well Subsidy	10-21	88
Stripper-Well Operators Outline Program	10-21	90
OPA Details Steps in Qualifying High-Cost Pools for Premium Price	11-11	68
Ceilings Advanced in 33 Pools; Purchasers Will Absorb Increases	11-11	68
All Subsidy Pools Are Listed	11-11	69
TRANSPORTATION, GENERAL (Also see Pipe Line Section)—		
Transportation Exerts Delicate Control Over Texas Oil Production	1-27	106
Completed 252—300 More Coming—J. P. O'Donnell	1-27	132
Revamped Transportation System in Position to Meet Emergency Conditions—Paul Reed	1-27	163
Tank Cars Growing More Vital to Adequate Petroleum Distribution	2- 3	28
Government Becomes Transportation Arbiter for Middle East Fields—Henry D. Ralph	2-10	28
Tanker Construction Quadrupled in 1943	2-17	37
Middle East Pipe Line Proposal May Upset Entire U. S. Petroleum Industry—Charles J. Deegan	2-24	58
President of I.P.A.A. Denounces Arabian Pipe-Line Project	2-24	62
Conversion of Big-Inch Lines to Gas Advocated by Swensrud	2-24	65
Experience in Laying WEP Lines Over Varied Terrain—Paul Reed	3- 2	52
Tankers Converted to Carriers—John P. O'Donnell	4- 6	24
Oil Deliveries to District 1 Will Decline Considerably Next Winter	6-10	49
Cleaning and Gas Freeing Cargo Compartments on Tankers—George D. Washburn	6-24	101
Shortages of Transportation and Materials Threaten Oil Supply	7-29	122
Prompt Repairs Improve Efficiency of Tank Cars	10-28	54
Postwar Transportation Aspects	11-18	164
Industry Turns to Aviation for Swifter Transportation Needs—T. F. Smiley	11-25	54

	Date	Page
TRENDS, INDUSTRY—		
Lighter Cars, New Power Units in Postwar Era, Scientist Predicts	1- 6	23
1944—In Prospect (Abs.)	1- 6	30
Plans for Superhighways Presage New Era for Oil Demand After War Ends—Henry D. Ralph	1-20	18
Upward Pressure of Aviation Program Evident in Crude-Oil Runs to Stills—H. Stanley Norman	1-27	135
Long Range Forecast of Motor-Gasoline Development—D. P. Barnard and R. R. Marschner	1-27	257
Postwar Economic Problems and Technical Discussions Share Time Before A. I. M. E.—(Abs.)—John P. O'Donnell	2-24	64
Refiners Warned of Trend to Socialization of Government—Arch L. Foster	3-30	50
Future Role of Oil Fuels—Arch L. Foster	4-20	52
Bureaus Vie for Authority in Probing Natural-Gas Industry	5-18	47
Earnings Reflect Record Operations—F. J. Sansone	6- 3	39
Outlook Bright for Keeping Oil's Place in Rubber Production	9-16	62
Rapid Expansion of Cooperatives Credited to Favored Tax Position	9-16	65
Shock of Early Postwar Oil Decline Centered on Texas—Richard J. Gonzalez	9-23	146
Expanded Pace of Oil Pipe-Line Building Program Is Maintained—Henry D. Ralph	9-23	220
Outlook Bright for Less Rigid Rationing When Nazis Fall—(Abs.)	9-30	84
27,000-Well Program Projected to Meet 1945 Requirements	10- 7	83
Key Oil Men See Sharp Rise in Postwar Use of Airplane—T. F. Smiley	10-14	68
Diesel Power High in Postwar Outlook, Automotive Leader Says	10-14	70
Present Patent System Defended at Industrial Research Forum—N. O. Fanning	10-14	73
Atlantic Economist Declares Removal of Control Essential to Postwar Business Growth	11- 4	44
Postwar Section—Nov. 18, 151-182 Inclusive:		
Postwar Motor-Fuel Outlook	11-18	153
Postwar Diesel and Distillate Fuel Oil Outlook	11-18	154
Postwar Residual Fuel-Oil Outlook	11-18	156
Postwar Lubricating Oils and Waxes Outlook	11-18	158
Postwar Kerosene Outlook	11-18	159
Postwar Natural Gasoline Outlook	11-18	159
Postwar Exploration Operations	11-18	160
Postwar Production Aspects	11-18	172
Postwar Refining Developments	11-18	175
National Planning Association Recommendations Are Criticized	12- 9	51

Trade Associations

	Date	Page
AMERICAN ASSOCIATION OF OILWELL DRILLING CONTRACTORS—		
Abstracts—Oilwell Drilling Contractors	10-14	67
AMERICAN ASSOCIATION OF PETROLEUM GEOLOGISTS—		
A.A.P.G.—A Challenge to Geology (Abs.)—A. Roger Denison	3-23	66
Geologists Prepare to Make New Uses of Old Exploration Tools in Oil Finding—Charles J. Deegan	3-30	56
AMERICAN CHEMICAL SOCIETY—		
A.C.S. Abstracts	4-13	122
A.C.S. Abstracts	9-16	95
Oil Companies Give U.O.P. to A.C.S. at New York Meeting—Arch L. Foster	9-23	142
Guaranty Bank Will Administer U.O.P. Gift	11- 4	48
AMERICAN GAS ASSOCIATION—		
Natural Gas Spring Conference, American Gas Association—J. French Robinson	5-11	105
Natural Gas Conference Delegates Discuss Means of Improving Wartime Service and Strengthening Postwar Operating Positions—C. O. Willson	5-18	50
A.G.A. Abstracts	5-18	53
A.G.A. Abstracts	5-18	76
AMERICAN INSTITUTE OF CHEMICAL ENGINEERS—		
Catalytical Cracking Economically Practicable, Engineers Are Told—(St. Louis meeting)—Arch L. Foster	12- 2	47
AMERICAN INSTITUTE OF MINING AND METALLURGICAL ENGINEERS—		
Postwar Economic Problems and Technical Discussions Share Time Before A.I.M.E. (Abs.)—John P. O'Donnell	2-24	64
A.I.M.E. Digests (Abs.)—Donald C. Bond	2-24	97
Reservoir Control and Behavior Discussed at A.I.M.E. Meeting—E. H. Short, Jr.	5-18	46
A.I.M.E. Abstracts	5-18	79
Secondary-Recovery Papers Feature Pacific Coast A.I.M.E. Meeting (Abs.)—L. P. Stockman	10-28	59
Abstracts of A.I.M.E. Technical Papers	10-28	60
AMERICAN PETROLEUM INSTITUTE—		
Technical Papers Draw Large Crowds to A.P.I. Pacific Coast District Meeting (Abs.)—L. P. Stockman	3-30	52
Research Credited With Solving Problems of Recovery in Nation's Oldest Oil Field—H. Stanley Norman	4-20	29
A.P.I. Abstracts	4-20	68
Enigmatic Two-M's, Manpower and Materials, Discussed by A.P.I. (Abs.)	5-25	65
A.P.I. Hears Pew Score Oil Controls—H. Stanley Norman	6- 3	32
Varied Topics Hold Interest at Houston A.P.I. Meeting—E. H. Short, Jr.	6-17	71
A.P.I. Abstracts	6-17	132
Oiling the Invasion (Abs.)—Robert E. Allen	6-17	132
A.P.I. Postpones Annual Meeting	6-24	58
A.P.I. Directors Propose 4-Point Policy in Foreign Affairs	12-16	38
AMERICAN SOCIETY OF MECHANICAL ENGINEERS—		
Advances in Prime-Mover Design Discussed at Power Conference—Paul Reed	5-11	98
A.S.M.E. Abstracts	5-11	130
A.S.M.E. Reactivates Petroleum Division at New York Meeting—N. O. Fanning	12- 2	49
AMERICAN SOCIETY FOR TESTING MATERIALS—		
Committee D-2 on Petroleum Products Holds Symposium on Sulfur Determination	5- 4	64
CALIFORNIA NATURAL GASOLINE ASSOCIATION—		
C.N.G.A. Reviews Wartime Accomplishments of the Industry—L. P. Stockman	10-21	98
C.N.G.A. Abstracts	10-21	97
INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA—		
Bowles Replies to Zook's Charges (I.P.A.A.)	4-27	36
Foreign Competition Vies With Price Consideration at I.P.A.A. Meeting—John P. O'Donnell	5- 4	36
I.P.A.A. Abstracts	5-11	140
I.P.A.A. Directors to Discuss Prices and Oil Agreement	10- 7	85
KENTUCKY OIL AND GAS ASSOCIATION—		
Independents Warned of Conflict With Foreign-Petroleum Program—Max L. Spray	7- 1	36
MID-CONTINENT OIL AND GAS ASSOCIATION—		
Reelects Old Officers	12- 9	50
NATIONAL LUBRICATING GREASE INSTITUTE—		
Grease Testing and Applications Subjects at N.L.G.I. Meeting	11- 4	46
NATIONAL OIL SCOUTS AND LANDMEN'S ASSOCIATION—		
Johns Named President of Scouts and Landmen's Association	4-27	36
NATIONAL ASSOCIATION OF CORROSION ENGINEERS—		
Saving of Steel Is Chief Theme at Corrosion Engineering Conference—E. H. Short, Jr.	4-13	118
N.A.C.E. Abstracts	4-27	46

NATURAL GASOLINE ASSOCIATION OF AMERICA—
N.G.A.A. War Products and Postwar Planning Conference (Abs.) ... 4-13 281
New Techniques and Postwar Trends Featured by N.G.A.A. (Abs.)—Paul Reed ... 4-20 32

PETROLEUM INDUSTRY ELECTRICAL ASSOCIATION—
P.I.E.A. Considers Technical Advances ... 4-27 32

PENNSYLVANIA GRADE CRUDE OIL ASSOCIATION—
Penn Grade Association Hears Discovery Prospects Analyzed ... 6-24 56

SOCIETY OF AUTOMOTIVE ENGINEERS—
Automotive Engineers Work for War, Plan for Peace—Arch L. Foster ... 1-20 13
Diesel Engineers and Refiners Discuss Mutual Problems (S.A.E.)—Arch L. Foster ... 5-25 74

Field Developments

Date Page

ARKANSAS—
Dual Completion With Crossover Packer in Dorcheat Pool, Arkansas—Paul Reed ... 3-30 93
Week's Highlights (Geol.) ... 7- 1 97

CALIFORNIA—
Net Reserves Decline as Production Rises Sharply—L. P. Stockman ... 1-27 191
Navy Opposes PAW Plea for More Elk Hills Production ... 2- 3 29
Discovery Well, Pleasant Valley Pool, Fresno County, California ... 2-17 83
Navy Endorses Higher Rate of Production at Elk Hills—Henry D. Ralph ... 5-18 42
Elk Hills Unit Plan Approved ... 5-25 66
Enactment of Bill Authorizing Elk Hills Unitized Operation Expected in Few Days—Henry D. Ralph ... 6- 3 29
New Pay Discovery, Arroyo Grande Field, San Luis Obispo County, Calif. ... 6- 3 69
Multiple Pays Create Complex Problems in San Joaquin Area ... 6-17 84
Elk Hills Drilling Program Outlined ... 6-24 53
Twelve Rigs Are Assigned to Increase Elk Hills Production ... 7- 8 43
California Urged to Permit Tideland Wells ... 7-29 131
California Drilling Campaign Will Continue Vigorous in Postwar Era—L. P. Stockman ... 8- 5 32
Horizontal Drilling From Vertical Hole Pioneered in California—L. P. Stockman ... 8-12 58
Development Program at Elk Hills in Full Swing—L. P. Stockman ... 8-19 72
New Depth Record Established for California; Well Still Drilling ... 10- 7 54
Three California Blowouts Occur Within Two Weeks—L. P. Stockman ... 10- 7 58
Standard of California Breaks World's Deep-Drilling Record—L. P. Stockman ... 10-21 86
1,000-Mile Texas-California Gas Line to Cost $60,000,000—L. P. Stockman ... 11-11 72
Exploratory Activity and Oil, Gas Discoveries in California, 1944—Albert I. Gregersen ... 11-18 193
Week's Highlights (Geol.) ... 12- 2 101

EASTERN—
Research Credited with Solving Problems of Recovery in Nation's Oldest Oil Field—H. Stanley Norman ... 4-20 39
Discovery Well, Durant Pool, Morgan County, Ohio 7- 8 153
Possible Future Oil Pools of Pennsylvania—R. E. Sherrill ... 7-29 129
Eighty-Fifth Anniversary Finds Drake Memorial Rich in Oil Lore—T. F. Smiley ... 8-26 83
Higher Recovery Predicted for Horizontally Drilled Wells ... 9-23 147

FLORIDA AND SOUTH GEORGIA—
Florida Discovery and Four New Mississippi Fields Draw Attention ... 1-27 249
A.A.P.G. Digests—Regional, Subsurface Stratigraphy and Structure of Florida and South Georgia—Paul and Esther Applin ... 3-23 92
Two Wildcat Tests Direct Attention to Oklahoma's Anadarko Basin and Florida ... 4- 6 26
Week's Highlights (Geol.) ... 5- 4 97
Regional Play Extends From Connecticut to Florida 7-22 39
Prospecting in Georgia Active; 9,000,000 Acres Leased—Garland Peyton ... 12-23 62
Six Wells Drilling in Florida; Five to Go Below 10,000 Ft.—Herman Gunter ... 12-23 63

ILLINOIS-INDIANA—
Wildcatters Find 75 Oil Wells in 15 Counties in Search for New Pools ... 1-27 223
Factors Controlling Oil-Well Completions in the Illinois Basin—Carl A. Bays ... 9- 9 49
Factors Controlling Oil-Well Completions in the Illinois Basin—Carl A. Bays ... 9-16 79
Studies Indicate Water Drives in Illinois Pools Increase Ultimate Recovery—Kenneth B. Barnes ... 10-14 89
Week's Highlights (Geol.) ... 11-11 125

KANSAS-NEBRASKA—
Discovery Wells Increase 32 Per Cent—Carl Hoot ... 1-27 232
Kansas Water-Flood Plant Incorporates New Features in Engineering Design—Frank B. Taylor ... 7- 1 70
Discovery Well, Vacek Pool, Ellsworth County, Kansas ... 8-12 103
Discovery Well, Adell Pool, Sheridan County, Kansas 9- 2 67

KENTUCKY—
Discovery Well, Hitesville Pool, Union County, Kentucky ... 4-20 81
Shallow Field in Southern Kentucky Receiving Intensive Development—Anthony McCauley ... 7-15 64

LOUISIANA—
Exploratory Wells Rise While Field Development Operations Fall Sharply ... 1-27 203
Coastal Louisiana Blowout Presents Numerous Capping Problems—J. F. Flint ... 2-20 43
Louisiana's Output of Cycling Products to be Doubled by Erath Plant—R. L. Keyes ... 4-13 295
79 Texas and Louisiana Fields Granted 10-Acre Well Spacing ... 8-26 73
Control of High-Pressure Salt Water and Heaving Shale in Deep Gulf Coast Well—Neil Williams ... 9-23 283
Week's Highlights (Geol.) ... 9-23 303
Dredging Canals for Servicing Fields in Marsh and Swamp Districts of Louisiana—Neil Williams ... 10-21 95
Week's Highlights (Geol.) ... 10-21 155
Directional Drilling as Development Aid in Coastal Louisiana Salt-Dome Field—Neil Williams ... 12- 9 66
Week's Highlights (Geol.) ... 12-16 119

MICHIGAN—
Ratio of Producers Rises as Exploration Increases 1-27 194

MISSISSIPPI-ALABAMA—
Florida Discovery and Four New Mississippi Fields Draw Attention ... 1-27 249
Exploration Spreading in Mississippi Fields Draw Attention ... 1-27 249
Week's Highlights (Miss.-Geol.) ... 2-10 87
Week's Highlights (Ala.-Geol.) ... 2-24 127
Week's Highlights (Miss.-Geol.) ... 4-20 93
Exploration Spreading in Mississippi Oil Prospects—Wm. Clifford Morse ... 5- 4 30
Mississippi Urged to Adopt Adequate Petroleum-Conservation Legislation ... 5-18 43
Week's Highlights (Miss.-Geol.) ... 6- 3 79
Special Practices Facilitate Drilling Deep Formations in Mississippi Field—Neil Williams ... 6-24 70
Cleaning Paraffin From Flow Lines in Mississippi Field—Neil Williams ... 7-15 96
Drilling Rigs of All Sizes and Types Employed in Mississippi Development—Neil Williams ... 7-22 45
Week's Highlights (Miss.-Geol.) ... 9- 2 77
Week's Highlights (Miss.-Geol.) ... 10- 7 117
Mississippi Operators Organize Engineering Committee ... 12-23 59
Possible Oil Area in Alabama Divided Into Two Parts—Stewart J. Lloyd ... 12-30 167

NEW MEXICO—
Maljamar Extension and Discovery in Lea Result of More Wildcatting ... 1-27 174
Discovery Well, of San Simon Pool, Lea County, New Mexico ... 3-23 145
Week's Highlights (Geol.) ... 10-14 131

TO COMPANY PRESIDENTS:

Here's Another BIG CHANCE FOR YOU to "Pass the Ammunition!"

Today—thanks largely to you and other industrial executives—22,000,000 civilian workers are speeding victory and achieving postwar security through the Payroll Savings Plan. Over 60% of the 6th War Loan subscriptions came from this source—and, between drives, this forward-looking plan has been responsible for 3 out of 4 War Bond sales!

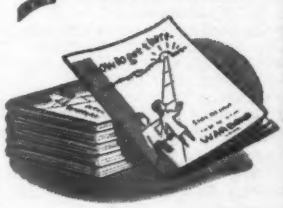
Good as this record is, the Payroll Savings Plan can be still more effective. Believing this can best be accomplished by giving Bond buyers a definite idea of the many benefits accruing to them, the War Finance Division has prepared a variety of active aids for employee education.

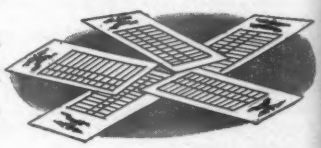
This new "ammunition" includes:

a—An entertaining, swift-paced moving picture, graphically showing the importance of buying—and holding—War Bonds.

b—An interesting, easy-to-read booklet, explaining how War Bonds may be accumulated to provide education for children, homes, retirement incomes, etc.

c—Attractive, handy War Bond envelopes, enabling Bond holders to note each separate purchase—and the specific purpose for which each Bond or group of Bonds was bought.





Passing this particular ammunition requires that you reappraise your own company's Payroll Savings Plan. Have your own War Bond Chairman contact the local War Finance Committee—today! They will welcome the chance to discuss this new program with you.

The Treasury Department acknowledges with appreciation the publication of this message by

THE OIL AND GAS JOURNAL
Tulsa 1, Oklahoma

This is an official U. S. Treasury advertisement prepared under the auspices of Treasury Department and War Advertising Council

	Date	Page
OKLAHOMA—		
Two Prospects on Eastern Flank of Anadarko Basin Showing Oil—Carl Hoot	1-13	29
Anadarko Promising—Carl Hoot	1-27	209
Improved Technique Lowers Drilling Time 25 Per Cent on West Edmond Wells—E. G. Dahlgren	3-16	59
Two Wildcat Tests Direct Attention to Oklahoma's Anadarko Basin and Florida	4- 6	26
Pure Oil Company Operates Closed-Type Salt-Water-Disposal System at Pauls Valley—Neil Williams	4-20	43
Week's Highlights (Geol.)	4-27	135
Week's Highlights (Geol.)	5-11	161
Week's Highlights (Geol.)	6-24	127
Discovery Well, Washington Field, McClain County, Oklahoma	7-22	79
West Edmond Field Presents Paradox—Charles J. Deegan	9- 9	44
Week's Highlights (Geol.)	9- 9	105
Week's Highlights (Geol.)	10-28	117
Week's Highlights (Geol.)	11-25	117
Wilcox Sand at Oklahoma City May Get Secondary-Recovery Project—Charles J. Deegan	12-16	60
Order Demanding That Republic Buy Peerless Gas Starts Fight	12-23	55
Status Report on West Edmond—Kenneth B. Barnes	12-23	68
ROCKY MOUNTAIN—		
Rise in Drilling Reflects Record Breaking Discoveries—Tolbert R. Ingram	1-27	199
Week's Highlights (Wyo.-Geol.)	2- 3	151
Streamlined Production System—Neil Williams	3- 9	41
Increased Oil Recovery by Gas Injection from Old Producing Sands at Salt Creek—Neil Williams	5-18	57
Extension Well, North McCallum Field, Jackson County, Colorado	5-25	121
Week's Highlights (Wyo.-Geol.)	7- 8	163
Week's Highlights (Wyo.-Geol.)	7-29	211
Geologic Aspects of Wyoming and Outlook for Development—Pierre La Fleiche	8- 5	38
Electrification of Salt Creek Field Embraces Approximately 1,000 Wells—Neil Williams	9-16	107
Week's Highlights (Wyo.-Geol.)	9-16	127
Black-Oil Producers See Early Solution to Marketing Problem	9-30	52
Week's Highlights (N. Mex.-Geol.)	10-14	131
Week's Highlights (Wyo.-Geol.)	11-18	265
Design of Stanolind's Elk Basin—Casper, Wyo., Crude-Oil Pipe Line—Paul Reed	12-23	82
Week's Highlights (Geol.)	12-30	291
TEXAS—		
East Texas—		
New Hope Field Shows Best Prospects for Development—Harry F. Simons	1-27	186
Week's Highlights (Geol.)	7-15	123
Discovery Well, South Tyler Pool, Smith County, Texas	10-14	117
Discovery Well, Eylau Pool, Bowie County, Texas	10-28	103
Texas Gulf Coast—		
Several New Pools Indicate Major-Production Caliber—T. F. Smiley	1-27	227
A Study of Corrosion in Gas and Condensate Wells in Katy Field, Texas—F. W. Jessen	5- 4	53
79 Texas and Louisiana Fields Granted 10-Acre Well Spacing	8-26	73
Control of High-Pressure Salt Water and Heaving Shale in Deep Gulf Coast Well—Neil Williams	9-23	283
North Texas—		
Strong Market Position Aids Deeper Development	1-27	214
Discovery Well, Guthrie Pool, King County, Texas	3- 9	73
Continental Uses Central Metering and Separator Batteries in North Texas—H. F. Simons	3-30	61
Week's Highlights (Geol.)	8- 5	89
Southwest Texas—		
Southwest Texas—Numerous Extensions and Discoveries Indicate Another Active Drilling Year—T. F. Smiley	1-27	179
Discovery Well, Wilcox Production, Slick Field, Goliad and Dewitt Counties, Texas	3- 2	79
Discovery Well, Scott & Hopper Pool, Brooks County, Texas	3-30	109
Discovery Well, Runge Field, Karnes County, Texas	5- 4	81
West Central Texas—		
Paraffin Problem in Panhandle Overcome by Water, Steam and Pressure	8-12	83
Permian Basin Operators May Expand Secondary Recovery—Frank B. Taylor	9- 2	43
Oil Shale of Central Texas—F. B. Plummer and Bruce Grant	10- 7	66
West Texas—		
Discovery Well, Masterson 3,500-ft. Pool (Tentative), Pecos County, Texas	1-13	81
Week's Highlights (Geol.)	1-13	91
Discovery Well, Clabberhill Pool, Andrews County, Texas	1-20	61
Three Ellenburger Discoveries Focus West Texas Interest on Ordovician—Harry F. Simons	1-27	169
Week's Highlights (Geol.)	2-17	95
Winkler's Three Ellenburger Pools Expanding Into Major Reserves—H. Stanley Norman	4- 6	26
Hard Drilling and Great Depths Increase Well Costs in Wheeler Ellenburger Field—Joseph C. Gordon	7-15	89
Discovery Well, Sand Hills Ellenburger Field, Crane County, Texas	7-15	111
Week's Highlights (Geol.)	8-26	143
Permian Basin Operators May Expand Secondary Recovery—Frank B. Taylor	9- 2	43
Processing of West Texas Sour Crudes at Shell's Wood River Refinery—L. R. Gray	10- 7	73
Processing of West Texas Sour Crudes at Shell's Wood River Refinery—L. R. Gray	10-14	98

Foreign

	Date	Page
ALASKA—		
Naval Appropriation Bill Includes $1,000,000 for Exploration in Alaska	4-20	34
Funds for Alaskan Exploration Denied	12-30	240
ANGLO-AMERICAN AND OIL PACT (also see Foreign under Economics)—		
First Foreign Oil Witness Heard in Closed Session—Henry D. Ralph	4- 6	22
American-British Petroleum Discussion Ends in Accord	5-11	102
Anglo-American Representatives Sign First Formal Oil Agreement—Henry D. Ralph	8-12	52
Leaders of Industry See Anglo-American Agreement as Preliminary Step Only	8-19	66
Pew Excoriates Vague Phrases in American-British Oil Agreement	8-26	76
Open Hearings Promised on Anglo-American Oil Pact	9- 2	24
Pending Oil Treaty Is Blasted as Violent Supererogation of Power	9-23	138
Contractors Urged to Work Against British-American Petroleum Treaty—Neil Williams	10- 7	55
Anglo-American Agreement Receiving Renewed Study—Henry D. Ralph	10- 4	62
Interstate Oil Compact Group Denounces Proposed Anglo-American Treaty—Charles J. Deegan	10- 4	63
Opposition to Oil Pact Spreads Among Texas Operators	10-28	50
PIWC Agrees to Further Study of Anglo-American Oil Pact—Henry D. Ralph	11- 4	40
Thompson Urges Pact Revision	11-11	66
Election Results Make Oil Pact an Exceedingly Vital Issue—Henry D. Ralph	11-18	185
Gulf Coast Refiners Rap Anglo-American Pact	11-18	188
Administration Expected to Ask for Early Action on Oil Pact—Henry D. Ralph	11-25	48
Minutes of Anglo-American Oil Agreement May Be Made Public—H. D. Ralph	12- 2	38
Connally's Stand Puts Another Strike on Anglo-American Pact	12- 9	50
Hardwicke Contends Agreement Does Not Extend Federal Power	12- 9	50
PIWC Approves Redraft of Pending Anglo-American Treaty—Henry D. Ralph	12-18	56
Several Major, Numerous Minor Variations in New Oil Pact	12-16	56
State Department Studying Proposed Oil-Treaty Changes—Henry D. Ralph	12-23	56
State Department Nearly Ready to Resume Oil-Agreement Discussions	12-30	164
CANADA—		
Truman Report Leaves Decision on Completing Canol to Army's Judgment—Henry D. Ralph	1-13	28

	Date	Page
Drilling Activity Shifts to Outlying Areas—Victor Lauriston	1-27	197
Lion Oil Refining Co. Project Deep Test in Western Nova Scotia	2-17	36
Geology and Development of the Norman Wells Oil Field—J. S. Stewart	4-27	136
Petroleum Possibilities North of "Sixty-One"—H. G. Cochrane	7-22	42
CANOL: An Engineering Project From Road Building to Completed Refinery—L. P. Stockman	9-30	65
Adjustments Made to Deliver Oil From South America to Canada	12-30	158
Another Tar-Sand Plant Authorized in Canada	12-30	240
Alberta Operators Intensify Exploration in Western Area—J. L. Irwin	12-30	249
Fifty-One Productive Wells in Norman Wells Field—Dr. J. S. Stewart	12-30	250
CHINA—		
China's Production of 3,000 Bbl. Daily Starts Nation Toward Self-Sufficiency—John P. O'Donnell	3- 9	34
Outline of Chinese Geology—J. Marvin Weller	3-23	101
COLOMBIA—		
Colombia's Casabe Field to Gain Pipe-Line Outlet Early Next Year	6-24	61
Barco Revealing True Productive Potentialities	7- 1	38
Phillips Leases Colombian Tract	8- 5	28
Tropical Oil Concession Extended	10-21	83
Texas Petroleum Co. Starting Colombian Test	12-30	162
Latin America Key to War Strategy	12-30	175
Gulf, Mexican and Caribbean Oil Zones—Jurassic	12-30	182
Gulf, Mexican and Caribbean Oil Zones—Cretaceous	12-30	184
Gulf, Mexican and Caribbean Oil Zones—Eocene-Oligocene	12-30	186
Gulf, Mexican and Caribbean Oil Zones—Miocene-Pliocene	12-30	188
South American Oil Zones—Devonian	12-30	190
South American Oil Zones—Permo-Carboniferous	12-30	192
South American Oil Zones—Mesozoic	12-30	194
South American Oil Zones—Eocene-Oligocene	12-30	196
South American Oil Zones—Miocene-Pliocene	12-30	198
Colombia Assured Its Greatest Producing Year in 1945	12-30	235
Tibu Outlet Increases Barco's Production	12-30	235
DOMINICAN REPUBLIC—		
Deep Drilling Planned in Dominican Republic Area	2-17	38
Deep Drilling Started in Haiti	12-30	235
Exploration in Dominican Republic Continued Despite Obstacles—N. D. Drake	12-30	256
Deep Zones in Cuba Attract Operators	12-30	258
ECUADOR—		
Tropical Oil Concession Extended	10-21	83
South American Oil Zones—Devonian	12-30	190
South American Oil Zones—Permo-Carboniferous	12-30	192
South American Oil Zones—Mesozoic	12-30	194
South American Oil Zones—Eocene-Oligocene	12-30	196
South American Oil Zones—Miocene-Pliocene	12-30	198
GERMANY—		
Systematic Campaign Under Way to Destroy German Oil Supplies	8-12	54
Bombing Follows Definite Pattern	8-12	54
Intensified Bombings Cripple Enemy Oil Installations	8-19	70
JAPAN—		
Jap Aviation-Fuel Operations Traced	9-16	71
MEXICO—		
War Department Refuses Comment and PAW Denies Knowledge of Mexico Line	3- 2	32
Broad Expansion of All Operations Planned by Mexican Petroleum Agency	3-16	51
Cracking of Latin-American Crude Oils—5—(Mexico)—Dr. Gustav Egloff	11-18	218
Cracking of Latin-American Crude Oils—6—Reforming Mexican Gasolines and Naphthas	12- 9	76
Construction Work Progressing Rapidly on Mexico's 100-Octane Refinery	12-30	158
Gulf, Mexican and Caribbean Oil Zones—Jurassic	12-30	182
Gulf, Mexican and Caribbean Oil Zones—Cretaceous	12-30	184
Gulf, Mexican and Caribbean Oil Zones—Eocene-Oligocene	12-30	186
Gulf, Mexican and Caribbean Oil Zones—Miocene-Pliocene	12-30	188
MIDDLE EAST—		
PRC Is Expected to Act Soon on Persian Gulf Petroleum Program—Henry D. Ralph	2- 3	18
A Geophysical Survey of Kuwait, Persian Gulf—Paul H. Boots	3-23	105
Knox Asserts Government Offered to Buy Rights of Companies in Arabia—Henry D. Ralph	4-20	34
Arabian Line Sound Venture, Texas Company Head Asserts	4-27	28
Gulf's Kuwait Contract Discussed—H. Stanley Norman	5- 4	32
Collier Endorses Arabian Line	5-11	102
Iran Rejects Russian Oil Proposal	10-28	56
Resignation of Premier Adds to Concern Over Iran Oil	11-18	188
Center of Production Shifting From U. S., Geologists Told—L. P. Stockman	11-18	190
Arabian-American Pressing Persian Gulf Construction—Henry D. Ralph	12- 9	52
Arabian Line Is a Practicable Postwar Project—Paul Reed	12-30	164
Middle East Petroleum Reserves Support Huge Expansion Program	12-30	170
Production Pushed to New Peaks	12-30	172
Arabian American Oil Co.'s Concession in Saudi Arabia Has Enormous Potentialities—L. P. Stockman	12-30	242
PARAGUAY—		
Start Exploration Work on Union Oil Co.'s Paraguay Concession	12-30	163
PERU—		
South American Oil Zones—Devonian	12-30	190
South American Oil Zones—Permo-Carboniferous	12-30	192
South American Oil Zones—Mesozoic	12-30	194
South American Oil Zones—Eocene-Oligocene	12-30	196
South American Oil Zones—Miocene-Pliocene	12-30	198
Nationalistic Policy in Peru Hampers Future Oil Prospects	12-30	253
ROMANIA—		
Soviet Advance Pointed at Nazi Oil Supply in Romania—J. P. O'Donnell	3-30	49
Ploesti Oil Prize Expected to Be Soon Converted to Allied Service	9- 2	24
Rich Ploesti Oil Field Now in Allied Hands	9- 9	42
Plans Under Way to Rehabilitate Allied Oil Properties in Romania—Henry D. Ralph	10- 7	50
Romanian Refinery Equipment Transferred to Russia	12-16	64
RUSSIA—		
Soviets Disclose How Industry Functioned During Nazi Invasion	6-17	81
Soviet Effort Injects New Angle in Foreign-Oil Deal—Henry D. Ralph	11-11	64
Romanian Refinery Equipment Transferred to Russia	12-16	64
VENEZUELA—		
Deeper Pay Discovered in Jusepin	6- 3	30
Socony-Vacuum to Join List of Venezuelan Shipping Companies	6- 3	30
Jusepin Area Constitutes Eastern Venezuela's Largest Reserve	6-10	50
Cracking of Latin-American Crude Oils—1—Eastern Venezuela—Dr. Gustav Egloff	6-24	74
Venezuela Oil Policy Lauded	7- 1	43
Cracking of Latin-American Crude Oils—2—Western Venezuela—Dr. Gustav Egloff	7- 1	64
Cracking of Latin-American Crude Oils—3—Colon (Venezuela)—Dr. Gustav Egloff	8-12	76
Creole's Venezuelan Production Increased 86 Per Cent	9- 2	23
Cracking of Latin-American Crude Oils—4—Cumarebo (Venezuela)—Dr. Gustav Egloff	9- 9	72
Venezuelan Oil Output Rises to All-Time Record	10- 7	51
New Companies Acquire Venezuelan Concessions	11-11	69
Las Mercedes Field Proven 6 Miles Long	12-30	162
Latin America Key to War Strategy	12-30	175
Gulf, Mexican and Caribbean Oil Zones—Jurassic	12-30	182
Gulf, Mexican and Caribbean Oil Zones—Cretaceous	12-30	184
Gulf, Mexican and Caribbean Oil Zones—Eocene-Oligocene	12-30	186
Gulf, Mexican and Caribbean Oil Zones—Miocene-Pliocene	12-30	188
South American Oil Zones—Devonian	12-30	190
South American Oil Zones—Permo-Carboniferous	12-30	192
South American Oil Zones—Mesozoic	12-30	194
South American Oil Zones—Eocene-Oligocene	12-30	196
South American Oil Zones—Miocene-Pliocene	12-30	198
Oil Transportation Highly Developed in Venezuela	12-30	201
Socony-Vacuum Concentrating on Development Drilling in Venezuela	12-30	206
Operation, Production and Development of Pantepec—Creole Unitized Properties	12-30	212
Jusepin Field a Model Operation—J. A. Holmes	12-30	215
Deeper Cretaceous Pay Hit in West Venezuela	12-30	240

Men Who Wrote for the Journal During 1944

Authors

	Date	Page
ALBERT, E. R., JR.		
Influence of Drilling Practices on Drilling-Mud Programs	12- 2	52
ALCOCK, E. D., GILLIN, J. A., and ARNETT, R. D.		
The Correlation Refraction Method of Seismic Surveying	3-23	106
ALTSHULER, J. A.		
Acid Treating at Low Temperature Solves Many High-Sulfur Fuel Problems	4-13	137
ALVES, H. A., and Mac KUSICK, B. L.		
Mercapsol Process for Gasoline Treating	4-13	126
AMSTUTZ, R. T., JR., and STEPHENSON, EUGENE A.		
Exclusion of Water From Oil Wells	6- 3	45
ANDERSON, H. H.		
More Pipe-Line Maintenance—Pressing Management Problem	9-23	200
APPLIN, PAUL AND ESTHER		
Regional Subsurface Stratigraphy and Structure of Florida and South Georgia	3-23	92
ARNETT, R. D., ALCOCK, E. D., and GILLIN, J. A.		
The Correlation Refraction Method of Seismic Surveying	3-23	106
BARNARD, D. P. and R. R. MARSCHNER		
Long Range Forecast of Motor Gasoline Development	1-27	257
BARNES, KENNETH B.		
ENGINEERING FUNDAMENTALS—Sept. 16, Sept. 23		
Studies Indicate Water Drives in Illinois Pools Increase Ultimate Recovery	10-14	89
Core Analysis: Methods and Applications—A Summary	10-21	98
North Burbank May Be Largest Individual Secondary-Recovery Reserve	11-25	62
Proper Maintenance and Equipment Economies Are Stressed at North Burbank	12- 2	62
Status Report on West Edmond	12-23	68
BARTON, PAUL D.		
Availability of Butylenes Main Consideration in Design of HF Alkylation Unit	2- 3	78
BATES, JOHN R.		
Houdry Unit Specifically Designed to Treat Aviation-Gasoline Base Stock	2- 3	75
BAYS, CARL A.		
Factors Controlling Oil-Well Completions in the Illinois Basin	9- 9	49
Factors Controlling Oil-Well Completions in the Illinois Basin	9-16	79
BEERS, ROLAND F.		
The Radioactivity and Organic Content of Some Paleozoic Shales	3-23	105
BENNETT, E. O.		
Centrifugal Compression of Hydrocarbon Gases	5-11	113
BENOIT, R. L.		
Legal Aspects of Unitization—History, Evolution and Present Status of the Law	4-13	297
BEU, KARL, KATZ, DONALD L., and DYKSTRA, HERMAN		
Precipitation of Asphalt From Crude Oil by Flow Through Silica	9-30	79
BLAND, R. E., and SMITH, E. A.		
Properties of Typical Products Refined by Houdry Cracking Process	4-13	209
BLOCH, HERMAN S., and THOMAS, CHARLES L.		
A.C.S. Abstracts	4-13	122
BOND, DONALD C.		
A.I.M.E. DIGESTS—Positive Colloid Muds	2-24	97
BOOTS, PAUL H.		
A Geophysical Survey of Kuwait, Persian Gulf	3-23	105
BRADY, L. J.		
The Spectrometric Analysis of Gases	8-12	87
BRAKER, E. A.		
Methods for Engineering Peak Power Requirements for Single Pumping Rigs	1-13	65
Methods for Engineering Peak Power Requirements for Single Pumping Rigs	1-20	36
Effect of Engine Power Impulses on Single Pumping-Rig Speed Variations	3- 2	68
BRANKSTONE, H. R.		
Geological Developments in the Southeastern Gulf Coastal States	4-20	40
BRANSCOMBE, G. H., and POOLE, FRANK		
Alkylation and Isomerization Facilities for 9,500 Barrels Per Day Are Provided	7- 8	92
BRENNAN, G. L.		
Increases in Natural-Gasoline Yield to Continue for Production of War Materials	4-13	282
BROWN, MORDEN G.		
The Abbe Refractometer and Use of Dispersion Measurements	1- 6	42
BRUCE, GRANT, and PLUMMER, F. B.		
Oil Shale in Central Texas	10- 7	66
BRUCE, DR. W. I.		
New Electrical Device Predicts Petroleum-Reservoir Behavior	6-24	63
BUCKLEY, STUART E.		
Petroleum Reservoir Efficiency and Well Spacing	3-23	98
BURHOUSE, W. A., and McKINNEY, D. R.		
Butadiene Plant Has Capacity of 55,000 Short Tons Per Year	7- 8	119
BUTHOD, PAUL, and WHITELEY, B. W.		
1—Heat Transfer by Conduction	6-17	99
2—Determination of Mean Temperature Difference	6-24	84
3—Practical Heat Transfer Calculations	7- 1	50
4—Heat Transfer Calculations	7-15	105
5—Heat Transfer Film Coefficients—Water Being Heated	7-22	66
6—Heat Transfer Film Coefficient—Water Being Cooled	7-29	197
7—Heat Transfer Film Coefficients—Steam Condensing on Ouside of Horizontal Tubes	8- 5	76
8—Heat Transfer Film Coefficients for Steam	8-12	92
9—Heat Transfer Film Coefficients—Petroleum Gases and Vapors	8-19	103
10—Shell-Side Film Coefficients	8-26	129
11—Pressure Drop Through Heat Exchangers	9- 2	56
12—Pressure Loss in Tubes of Heat Exchangers	9- 9	83
13—Pressure Drop—Shell Side of Tubular Heat Exchangers	9-16	91
14—Heat Balances	9-23	289
15—Fouling Resistances	10- 7	84
16—Economic Approach Temperature	10-14	110
17—Factors in Design and Operation of Heat Exchangers	10-21	135
CHAPMAN, H. L.		
Labor Is Key Component in South American Development	5-25	68
CHENEY, M. G.		
Critical Factors to Be Considered in Well Spacing	3-23	94
CLARK, J. A., and McKINLEY, G. W.		
Transmission Line Experience in Appalachian Region	5-18	69
CLARK, W. A., and FARRAND, W. H.		
Drilling Fluid for the Completion of Shallow Wells	4- 6	47
COCHRANE, H. G.		
Petroleum Possibilities North of "Sixty One"	7-22	42
COLLIER, GEORGE P.		
Underground Reinforced Concrete Tank for Aviation-Gasoline Storage	10-28	66
COOK, F. V.		
Turbochargers Help Greatly in Boosting Horsepower at Pipe-Line Pumping Stations	9- 2	37
COOLEY, H. M.		
Factors Involved in Design of Long Strings of Casing	1-20	25
CRAGIN, ROBERT G.		
Technology's Part in the Aviation Gasoline Program	4-13	142
CRAVENS, W. T., and MYLIUS, B. H.		
Thermal Processing Units Have Combined Capacity of 127,500 Barrels Per Day	7- 8	98
CRAWFORD, F. W., and MORGAN, T. D.		
Time-Saving Computing Instruments Designed for Spectroscopic Analysis	8-26	100
CREED, J. L.		
Atmospheric Temperatures on Portland Line Vary 152°F.	9-23	183
DAHLGREN, E. G.		
Improved Technique Lowers Drilling Time 25 Per Cent on West Edmond Wells	3-16	59
Underground Storage of Natural Gas	4-20	68
DAVIES, RALPH K.		
Coordinated Utilization of Foreign Oil Has Made Industry's War Record Possible	12-30	178
DAVIS, R. L.		
Evaluation of Plant "Fire-Control Index"	12- 2	67
DAVIS, W. B., and ELLISTON, H. W.		
A Method of Handling Salt-Water Disposal Including Treatment of Water	6- 3	59

	Date	Page
DAWE, HAROLD F., and WADE, HENRY N.		
Seven Compressor Stations Spaced According to Best Pipe-Line Economics	11- 4	101
Design Features of Compressor Stations on Tennessee Natural-Gas Line	11-11	100
Design of the Dehydration Plant for the Tennessee Natural-Gas Pipe Line	11-25	68
DAY, CHARLES C., JR.		
Additions to Richfield's Watson Refinery Nearly Double Aviation-Gasoline Output	10-21	110
DEEGAN, CHARLES J.		
Middle East Pipe Line Proposal May Upset Entire U. S. Petroleum Industry	2-24	58
Price Issue Is Appealed to the President	3-16	46
Rising Military Demand Lowers Gasoline Supply Available to Car Owners	3-23	57
Geologists Prepare to Make New Uses of Old Exploration Tools in Oil Finding	3-30	56
Completions Lag 14 Per Cent Behind Quota	4-13	117
Well Completions Increase 30 Per Cent First Half of 1944	7-29	135
Production Increases 100,742,000 Bbl.—Demand Forces Second-Half Forecast Upward	7-29	137
West Edmond Field Presents Paradox	9- 9	44
Interstate Oil Compact Group Denounces Proposed Anglo-American Treaty	10-14	63
Wilcox Sand at Oklahoma City May Get Secondary-Recovery Project	12-16	60
De LAUNE, J. B.		
Safety, Guard, and Fire Departments Work as Units in Plant Protection	7- 8	127
DENISON, A. ROGER		
A.A.P.G.—A Challenge to Geology	3-23	66
DOTTERWEICH, F. H., and DUCKER, R. W.		
Cycling Has Significant Relation With Natural Gas Operations	5-11	107
DRAKE, N. D.		
Exploration in Dominican Republic Continues Despite Obstacles	12-30	256
DRALLE, H. E.		
A "Critical Material" for Refineries	6-10	69
DUCKER, R. W., and DOTTERWEICH, F. H.		
Cycling Has Significant Relation With Natural Gas Operations	5-11	107
DYKSTRA, HERMAN; BEU, KARL, and KATZ, DONALD L.		
Precipitation of Asphalt From Crude Oil by Flow Through Silica	9-30	79
EBNER, EMIL E., and MERTENS, F. T.		
Solvents Carry the Load in Quaker State's New Lubricating Oil Plant	4-13	173
EGLOFF, DR. GUSTAV		
Cracking of Latin American Crude Oils—1—Eastern Venezuela	6-24	74
Cracking of Latin American Crude Oils—2—Western Venezuela	7- 1	64
Thermal Reforming for Olefin Production	7-29	157
Cracking of Latin American Crude Oils—3—Colong (Venezuela)	8-12	76
Cracking of Latin American Crude Oils—4—Cumarebo (Venezuela)	9- 9	72
Cracking of Latin American Crude Oils—5—Poza Rica (Mexican)	11-18	218
Cracking of Latin American Crude Oils—6—Reforming Mexican Gasolines and Naphthas	12- 9	76
ELLIOTT, ORIN M.		
Water Purification Processes Adaptable to Changing River Conditions	2- 3	103
ELLISTON, H. W., and DAVIS, W. B.		
A Method of Handling Salt-Water Disposal Including Treatment of Water	6- 3	59
EVERING, B. L.; FRAGEN, N., and WEEMS, G. S.		
The Commercial Isomerization of Lighter Paraffins	10-28	77
FANNING, N. O.		
Present Patent System Defended at Industrial Research Forum	10-14	73
A.S.M.E. Reactivates Petroleum Division at New York Meeting	12- 2	49
FARRAND, W. H., and CLARK, W. A.		
Drilling Fluid for the Completion of Shallow Wells	4- 6	47
FAUST, J.		
Asphaltization Tests for Lubricating Oil	1-20	29
FINCH, LEWIS, JR. and WHITNEY, M. ELIAS		
Coring With a Reverse-Circulation Rig	6- 3	49
FLAITZ, J. M.		
General Review of Development and Economics of Natural-Gas Cycling Plants	4-20	46
FLINT, J. F.		
Coastal Louisiana Blowout Presents Numerous Capping Problems	2-10	43
FORBES, A. L., JR.		
Pressure Welding Applications Increase	9-23	263
FOSTER, ARCH L.		
"Grain" Alcohol From Cracked Hydrocarbon Gases	1- 6	30
Automotive Engineers Work for War, Plan for Peace	1-20	13
Industry Praised for Patience in Waiting Turn on Priorities for Butadiene Plants	3- 2	30
Pooling of Raw-Material Resources Gives the United States Its Largest Butadiene-From-Petroleum Factory	3- 2	43
Mid-Continent Refiners' Crude Supply Critical; Sour Oils No Solution	3- 9	22
Sarnia Plant Is Complete Rubber Factory, With Capacity of 38,000 Tons Annually	3-16	62
Refiners Warned of Trend to Socialization of Government	3-30	50
Toluene Recovery Plant Employs Azeotropic Distillation	4-13	139
Economy of Crude, Efficiency of Refining Processes Keynote of Postwar Industry	4-13	189
Future Role of Oil Fuels	4-20	52
Suspensoid Catalytic Cracking System Gives Nearly 60 Per Cent Gasoline Yield	5- 4	43
Diesel Engineers and Refiners Discuss Mutual Problems	5-25	74
Outlook for Postwar Diesel Fuels	5-25	93
Cities Service Dedicates War Plant	6- 3	33
Plastics from Petroleum Hydrocarbons Have Had Spectacular Growth	6-10	85
New Cities Service Plant is "THE REFINERY OF TOMORROW"	7- 8	84
Champlin Aviation-Fuel Plant Exceeding Designed Alkylate Capacity	8- 5	67
Root Petroleum Co. Making More Alkylate Than Plant Was Designed For	8-19	71
Fischer-Tropsch Synthesis May Prove a Major Refining Process—Part 1	8-19	89
Mid-Continent Refiners Reappraising Postwar Position of Catalytic Cracking	9- 2	30
Fischer-Tropsch Synthesis May Prove a Major Refining Process—Part 2	9- 2	46
Fischer-Tropsch Synthesis May Prove a Major Refining Process—Part 3	9- 9	66
Oil Companies Give U.O.P. to A.C.S. at New York Meeting	9-23	142
Research Council Honored With Army Ordnance Service Award	9-30	62
Associated Refinery Draws Charge Stocks From Eight Different Refineries	10-21	114
New Lube Plant Uses Duo-Sol Extraction, Benzol-Ketone Dewaxing Processes	11- 4	62
Synthetic Rubber at 10.7 Cents Is Forecast at Chemists' Meeting	11-25	52
Catalytic Cracking Economically Practicable, Engineers Are Told	12- 2	46
FRONT LINES IN REFINING: Jan. 6, Jan. 20, Mar. 9, Apr. 6, May 11, May 18, June 10, June 17, Aug. 12, Oct. 7, Nov. 25, Dec. 16.		
FRAGEN, N., WEEMS, G. S., and EVERING, B. L.		
The Commercial Isomerization of Lighter Paraffins	10-28	77
FREY, A. W.		
Wrecked Diesel Pipe-Line Engine Restored to Service Without Welding	12-16	70
FROST, A. V.		
Improvement of Octane Rating of Gasoline by Isomerization	7-29	165
GABY, PHIL P.		
A New Type of Seismic Cross-Section Wherein Accuracy of Representation Is Rendered Insensitive to Velocity Error	3-23	105
GILLIN, J. A.; ARNETT, R. D., and ALCOCK, E. D.		
The Correlation Refraction Method of Seismic Surveying	3-23	106
GOLDSBERRY, J. F.		
Accident Rate at Wood River Refinery Lowered Despite Increased War Construction	9- 9	80
GOLDSBY, F. L.		
Petroleum Conservation Demands Modern Storage Equipment	4-13	220
GONZALEZ, RICHARD J.		
Shock of Early Postwar Oil Decline Centered on Texas	9-23	146
GORDON, JOSEPH C.		
Greater Depths and Hard Formations Increase Ordovician Drilling Costs	5-18	81
Changeover Packers Solve One Problem in Embar Field Dual Completions	6-17	109
Hard Drilling and Great Depths Increase Well Costs in Wheeler Ellenburger Field	7-15	80
GORDON, J. D.		
Liquid Hydrocarbon Treating With Aqueous Amine Solutions	4-13	202

	Date	Page
GRAY, L. R.		
Processing of West Texas Sour Crudes at Shell's Wood River Refinery	10- 7	73
Processing of West Texas Sour Crudes at Shell's Wood River Refinery	10-14	98
GRAY, T. G., and PRICE, W. H.		
Eight Different Fractions Are Treated Chemically in Five Separate Units	7- 8	110
GREGERSEN, ALBERT I.		
Exploratory Activity and Oil, Gas Discoveries in California, 1944	11-18	193
GRISWOLD, J. W., and SCHEUMANN, W. W.		
Chemical Laboratory Equipped for Control and Experimental Operations	7- 8	95
GROENDYCKE, R. W., and MATTIX, E. D.		
Nearly 1,600 Instruments Installed in Basic Refinery and Butadiene Plant	7- 8	105
GUNTER, HERMAN		
Six Wells Drilling in Florida; Five to Go Below 10,000 Ft.	12-23	63
GWYN, H. M., JR.; KING, H. L., JR., and LAUGHLIN, C. D.		
Bauxite as an Adsorbent, Catalyst, and Catalyst Carrier	4-13	236
Bauxite as an Adsorbent, Catalyst, and Catalyst Carrier—Part 2	4-20	71
HAINES, CHARLES		
Factors in Design of Research Laboratory	11-18	202
HAMMER, SIGMUND		
Estimating Ore Masses in Gravity Prospecting	3-23	109
HANEY, J. D., and MATEER, G. L.		
Three Fluid Catalytic Cracking Units Form the Heart of New Refinery	7- 8	87
HARTS, H. W.		
Hawkins Plant Recovers Isoparaffin Higher Than 95 Per Cent Purity	8- 5	57
HAUGETO, KJETIL, and WHYTE, C. B.		
Subsoil Conditions and Foundations	7- 8	121
HEITZLER, A. H.		
Power, Steam Generation and Distribution Systems at Lake Charles Refinery	7- 8	115
HELMERS, C. J., and SCHULZE, WALTER A.		
Gas-Oil Cracking by the Cycloversion Process	4-13	225
HELTZEL, WILLIAM G.		
Trend in Pipe-Line Practices	9-23	154
Trend in Pipe-Line Practices	9-30	91
HILL, J. BENNETT		
Ample Laboratory Facilities and Personnel Assure Efficient Control of Processes	2- 3	92
HILL, JAMES E.		
Union Oil Co. of California Plans and Institutes New Cooperative Methods of Training and Upgrading Refinery Employes	3- 9	45
HOCHGESANG, F. P.		
Radiation—The New Petroleum Analytical Tool	1-13	41
HOLMES, J. A.		
Jusepin Field a Model Operation	12-30	215
HOOT, CARL		
Two Prospects on Eastern Flank of Anadarko Basin Showing Oil	1-13	29
Anadarko Promising	1-27	209
Discovery Wells Increase 32 Per Cent	1-27	232
HOWARD, W. V.		
Withdrawals From Major Fields Forced Higher to Supply Growing War Demand	2- 3	23
Status of Large Fields Warns of Impending Shortage of Domestic Oil Supply	2-10	39
Wildcat Drilling Has Failed to Keep Up With Increasing Need of Discoveries	2-17	41
Asserted Increase in Number of New Discoveries Offset by Poor Quality	3- 2	34
HYDE, MERRITT J.		
Station Instrumentation and Control—"Nerve Center" of Pipe-Line Operation	9-23	251
INGRAM, TOLBERT R.		
Rise in Drilling Reflects Record Breaking Discoveries	1-27	199
Public Domain Problems Discussed at Compact Meeting	7- 8	40
IRWIN, J. L.		
Alberta Operators Intensify Exploration in Western Area	12-30	249
JESSEN, F. W.		
A Study of Corrosion in Gas and Condensate Wells in Katy Field, Texas	5- 4	53
JONES, J. DELBERT		
Methods and Equipment for Wartime Pump-Station Maintenance	9-23	152
JONES, PARK J.		
Elements of Production Mechanics—No. 1	11- 4	53
Porosity, Number of Voids, and Surface Area—No. 2	11-11	87
Properties of Water Found in Reservoirs—No. 3	11-18	205
Interstitial Water, Gravity, and Capillary Pressure —No. 4	11-25	83
Permeability, Type of Pay, and Interstitial Water —No. 5	12- 2	73
Core Data as a Production Tool—No. 6	12- 9	89
Resistivity of Pay and Non-pay—No. 7	12-16	88
Characteristics of Electric Logs—No. 8	12-23	75
Application of Electric-Log Data—No. 9	12-30	270
KALICHEVSKY, V. A., and SAVAGE, F. C.		
Field Tests Are Necessary to Evaluate Lubricating Oils	11-11	77
KARGE, FRITZ		
Important Changes Introduced in Lines for Heavy Oils	9-23	244
KATZ, DONALD L., DYKSTRA, HERMAN, and BEU, KARL		
Precipitation of Asphalt From Crude Oil by Flow Through Silica	9-30	79
KEELER, J. FRED		
Welding of Refinery Tubes Involves Complicated and Exact Technique	4-13	162
KEYES, R. L.		
Louisiana's Output of Cycling Products to Be Doubled by Erath Plant	4-13	295
KIGHTLINGER, EARL		
Automatic-Control Installations for Natural-Gas Pipe-Line Systems	9-23	157
KING, H. L., JR.; LAUGHLIN, C. D., and GWYN, H. M., JR.		
Bauxite as an Adsorbent, Catalyst, and Catalyst Carrier	4-13	236
Bauxite as an Adsorbent, Catalyst, and Catalyst Carrier—Part 2	4-20	71
KNOBLAUCH, K. R.		
A Look Ahead to the Future of Instrumentation in Refining	4-13	247
KOMAREWSKY, V. I., RIESZ, C. H., and PELICAN, T. L.		
Catalytic Dehydrogenation of Natural-Gas Hydrocarbons	7-15	67
KORNFELD, M. M.		
Subsurface Correlation by Detailed Electrolog Tabulation	3-23	109
LA CROIX, H. N.		
Improved Refining of Sour Crudes by New Tannin Solutizer Process	2-10	50
La FLEICHE, PIERRE		
Geologic Aspects of Wyoming and Outlook for Development	8- 5	38
LAHEE, FREDERIC H.		
Wildcat Wells 17 Per Cent Successful	3-23	69
Standardization in Compiling Data on Exploratory Drilling and Crude-Oil Reserves	6-17	132
LASSIAT, R. C., and PARKER, F. D.		
Butane Dehydrogenation by the Houdry Process	11-18	229
LAUGHLIN, C. D.; GWYNN, H. M., JR., and KING, H. L., JR.		
Bauxite as an Adsorbent, Catalyst, and Catalyst Carrier	4-13	236
Bauxite as an Adsorbent, Catalyst, and Catalyst Carrier—Part 2	4-20	71
LAURISTON, VICTOR		
Drilling Activity Shifts to Outlying Areas	1-27	197
LILJENSTEIN, G. M., and SCHAUFELBERGER, W. M.		
A Rapid Test for Isobutane Fractions in Natural-Gasoline-Plant Residue Gases	12-16	96
LLOYD, STEWART J.		
Possible Oil Area in Alabama Divided Into Two Parts	12-30	167
LOEFFLER, J. E.		
Choke Control of Gulf Coast Wells	10-21	105
Choke Control of Gulf Coast Wells—No. 2	10-28	89
Choke Control of Gulf Coast Wells—No. 3	11-11	91
Choke Control of Gulf Coast Wells—No. 4	11-18	214
MacKUSICK, B. L., and ALVES, H. A.		
Mercapsol Process for Gasoline Treating	4-13	126
MacROBERTS, D. T.		
Cavitation as a Possible Cause of Internal Corrosion	9-23	239
McCAULEY, ANTHONY		
Shallow Field in Southern Kentucky Receiving Intensive Development	7-15	64
McCORMICK, R. L., and PFISTER, R. J.		
A Method for Determining Water Input Profile	12-16	78
Water-Input Profile Measurements	12-23	92
McFADDIN, D. E.		
Design and Construction of the Santa Maria Valley Absorption Plant	7-29	145
McKINLEY, G. W., and CLARK, J. A.		
Transmission Line Experience in Appalachian Region	5-18	69
McKINNEY, D. R., and BURHOUSE, W. A.		
Butadiene Plant Has Capacity of 55,000 Short Tons Per Year	7- 8	119

	Date	Page
MAASS, RANDAL		
Operation of the Central Gas Plant at The General Petroleum Refinery	9- 9	59
MADSEN, M. C.		
Compressor-Station Design for Long-Distance Natural-Gas Transmission Systems	5-18	71
MARKLE, L. E.		
Design of Electrical Circuits for Low-Voltage Protection in Start Button Control Hook-Up	5- 4	76
MARSCHNER, R. F., and BARNARD, D. P.		
Long Range Forecast of Motor Gasoline Development	1-27	257
MARTIN, C. R.		
One-Man Valves for the Little-Inch Pipe Line	3-30	76
MASE, R. P., and TURNER, M. C.		
Reforming and Polymerization Are Major Tools for Postwar Refining	4-13	204
MATEER, G. L., and HANEY, J. D.		
Three Fluid Catalytic Cracking Units Form the Heart of New Refinery	7- 8	87
MATHENY, W. F.		
Many Factors to Consider in Gasoline-Plant Projects	4-27	61
MATTIX, E. D., and GROENDYCKE, R. W.		
Nearly 1,600 Instruments Installed in Basic Refinery and Butadiene Plant	7- 8	105
MENAUL, PAUL L.		
Causative Agents of Corrosion in Distillate Field	11-11	80
MERTENS, F. T., and EBNER, EMIL E.		
Solvents Carry the Load in Quaker State's New Lubricating Oil Plant	4-13	173
MILLER, E. B., JR.		
Plug-Back Work With Plastics	6-17	92
MITCHELL, DR. R. W.		
Refinery Cleaning Problems—Methods and Materials That Have Been Developed for Effective, Safe Cleaning	2-10	70
Methods and Materials That Have Been Developed for Effective, Safe Cleaning	2-17	65
MORGAN, T. D., and CRAWFORD, F. W.		
Time-Saving Computing Instruments Designed for Spectroscopic Analysis	8-26	100
MORIARITY, F. C.		
Soda-Methanol Reagent Removes Mercaptans Quantitatively at Big West Oil Co.	3-30	82
MORSE, WILLIAM CLIFFORD		
Exploration Spreading in Mississippi Oil Prospects	5- 4	30
MYLIUS, B. H., and CRAVENS, W. T.		
Thermal Processing Units Have Combined Capacity of 127,500 Barrels Per Day	7- 8	98
NELSON, W. L.		
Questions on Technology—Jan. 6, Jan. 20, Jan. 27, Feb. 17, Feb. 24, Mar. 2, Mar. 16, Mar. 23, Mar. 30, Apr. 6, Apr. 20, Apr. 27, May 4, May 18, May 25, June 10, June 17, July 1, July 8, July 15, July 29, Aug. 5, Aug. 19, Aug. 26, Sept. 2, Sept. 30, Oct. 7, Oct. 28, Nov. 4, Nov. 18, Nov. 25, Dec. 9, Dec. 16, Dec. 30.		
Progress in Metals—Jan. 13, Feb. 10, Mar. 9, Apr. 13, May 11, June 3, June 24, July 22, Aug. 12, Sept. 9, Oct. 21, Nov. 11, Dec. 2, Dec. 23.		
Catalytic Cracking and the Small Refiner	10- 7	90
NEPTUNE, F. B.		
Operation of Partial Loops	9-23	204
NORMAN, H. STANLEY		
Recent Surge in Well Completions Fails to Offset First-Half Decline	1-27	126
Upward Pressure of Aviation Program Evident in Crude-Oil Runs to Stills	1-27	135
Winkler's Three Ellenburger Pools Expanding Into Major Reserves	4- 6	26
Production of Natural Gasoline and Cycle Products to Rise 27,000 Bbl. Daily	4-13	121
Research Credited With Solving Problems of Recovery in Nation's Oldest Oil Field	4-20	29
Gulf's Kuwait Contract Discussed	5- 4	32
A.P.I. Hears Pew Score Oil Controls	6- 3	32
Drilling Forecast—Sharp Increase Indicated	7-29	132
Record-Breaking Refinery Requirements Face Industry	7-29	139
Quartermaster School Supplies Army With Technicians	9-30	58
Demand Misconception Cause of Current Residual Maladjustments	12- 2	39
1945 Will See Intensified Search for Foreign Reserves	12-30	159
NORTON, JOHN G.		
Operation and Maintenance of a Crude-Oil Pipe Line Without Spare Units	5-11	127
O'DONNELL, J. P.		
Completed 252—300 More Coming	1-27	132
World Production Will Set Another Record This Year	1-27	143
Latest Addition to Sun Refinery Greatly Swells 100-Octane Output	2- 3	68
Net Decline of 18.6 Million Barrels Shown in Reserves by A.P.I. Annual Report	2-24	61
Postwar Economic Problems and Technical Discussions Share Time Before A.I.M.E.	2-24	64
Shell-Developed Cumene Process Has Speeded Aircraft-Fuel Program	2-24	73
Demand for 850 Million Barrels of Gasoline Per Year Predicted by 1950	3- 2	36
China's Production of 3,000 Bbl. Daily Starts Nation Toward Self-Sufficiency	3- 9	34
Pipe Still Processes More Than Ten Million Barrels in Single Run	3-23	111
Soviet Advance Pointed at Nazi Oil Supply in Romania	3-30	49
British American Refinery at Clarkson Embodies Latest Design Developments	3-30	64
Tankers Converted to Carriers	4- 6	24
Socony-Vacuum Uses Continuous Automatic Lead Blender	4-27	43
Shell's Wood River Plant Exemplifies Progress in 100-Octane Manufacture	5- 4	33
Foreign Competition Vies With Price for Consideration at I.P.A.A. Meeting	5- 4	36
Common Carrier Lines May End Middle East Muddle	5-11	103
World Court Judge Blasts Petroleum Reserves Policy	5-18	48
Disposal of Surplus Crude Is Immediate Postwar Problem	7- 1	40
Tannin Solutizer Process Practically Automatic; Saves 6.5 Per Bbl.	7- 1	45
Jersey's Preventive Maintenance Course Is Highly Successful	7-22	48
Reduction in Demand, With End of the European War, Is Not Expected to Be Drastic	8-12	50
Paulsboro T.C.C. Unit Features Solid Catalyst Bed	11-11	82
O'RIORDAN, J. E.		
Diesel Engine Automatic Speed-Control Experience	9-23	219
PARKER, F. D., and LASSIAT, R. C.		
Butane Dehydrogenation by the Houdry Process	11-16	229
PEASE, SHERMAN L.		
Determining Fluid Movement in Wells	12- 2	82
PELICAN, T. L., KOMAREWSKY, V. I., and RIESZ, C. H.		
Catalytic Dehydrogenation of Natural-Gas Hydrocarbons	7-15	67
PERKINPINE, R. W.		
A Telephone Dispatching Circuit for the Big-Inch Pipe Lines	8-26	91
PEW, J. HOWARD		
Completion of 15 Plant Marks Fulfillment of Pearl Harbor Pledge	2- 3	66
PEYTON, GARLAND		
Prospecting in Georgia Active; 9,000,000 Acres Leased	12-23	62
PFISTER, R. J., and McCORMICK, R. L.		
A Method for Determining Water Input Profile	12-16	78
Water-Input Profile Measurements	12-23	92
PIROOMOV, R. S.		
Technical Groups Supervise Process Control at Jersey's Refineries	9- 2	53
PLUMMER, DR. F. B.		
ENGINEERING FUNDAMENTALS—Sept. 30, Oct. 7, Oct. 14, Oct. 21, Oct. 28, Nov. 4, Nov. 11, Nov. 18, Nov. 25, Dec. 2, Dec. 9, Dec. 16, Dec. 23, Dec. 30.		
PLUMMER, F. B., and GRANT, BRUCE		
Oil Shale in Central Texas	10- 7	66
POLLEY, A. B., and TODD, R. W.		
Modern Methods of Reconditioning Large-Diameter Pipe	10-14	79
POOLE, FRANK, and BRANSCOMBE, G. H.		
Alkylation and Isomerization Facilities for 9,500 Barrels Per Day are Provided	7- 8	92
PRICE, W. H., and GRAY, T. G.		
Eight Different Fractions Are Treated Chemically in Five Separate Units	7- 8	110
RAIGORODSKY, PAUL M.		
Conservation in Postwar Era to Change Character of Natural-Gasoline Plants	4-13	300
RALPH, HENRY D.		
Multizone Completion and Reworking Restrictions in PAO 11 Relaxed by PAW	1- 6	32
International-Oil Plan Discussed as Reversal of Lend-Lease Operations	1-13	25
Truman Report Leaves Decision on Completing Canol to Army's Judgment	1-13	28
Plans for Superhighways Presage New Era for Oil Demand After War Ends	1-20	18
Proposed Abolishment of PRC May Throw Foreign Oil Issue Into Politics	1-27	102

	Date	Page
Enigma of Crude-Oil Supply Only Threat to Industry's War Machinery	1-27	147
PRC Is Expected to Act Soon on Persian Gulf Petroleum Program	2- 3	18
Material-Control Rules Relaxed and Paper Work on Priorities Reduced	2- 3	26
Government Becomes Transportation Arbiter for Middle East Fields	2-10	28
Permanent Petroleum Policy Expected to Result From Broadened Senate Study	2-17	32
Senate Starts Work on Assignment to Develop Policy on Foreign Oil	2-24	56
Operators to Receive Preview of OPA's Stripper-Well Subsidy Proposal	3- 2	26
Opposition to Arabian Line May Hasten Formation of Oil Policy	3- 9	30
Advocates of Arabian Line Race Against Time to Beat Threatened Interferences	3-16	52
Synthetic-Rubber Plan to Suffer Unless Engineers Are Spared by Military	3-23	62
Principals in Foreign Oil Policy Dispute Preparing Cases for Inspection of Senate	3-30	48
Industry Urged to Take Steps for Deferment of Key Men Through PAW	3-30	54
First Foreign Oil Witness Heard in Closed Session	4- 6	22
Interagency Committee to Evolve Deferment Plan for Key Men in Oil Industry	4- 6	28
Knox Asserts Government Offered to Buy Rights of Companies in Arabia	4-20	34
International Oil Compact Believed Slated for Consideration at Resources Conference	4-27	28
Navy Endorses Higher Rate of Production at Elk Hills	5-18	42
Enactment of Bill Authorizing Elk Hills Unitized Operation Expected in Few Days	6- 3	29
Last-Ditch Fight Launched to Tack Oil Parity on Price Bill	6-10	44
Congress Veers Away From Condemnation of Oil Land	6-10	46
Arabian Pipe Line Project Is Dormant Possibly Indefinitely	6-24	54
Government's Covetous Glances at Oil Reserves Held Alarming	7- 8	37
Revised PAO-11 Meets Requests of Southwestern Operators	7- 8	42
Subsidy Payments for Crude Authorized	7-15	54
Many Instruments of War Come From Oil Research	7-15	60
Details Taking Shape for Start of Crude-Oil Subsidy Plan	7-22	34
Nation's Fields Producing at Maximum Efficient Rate	7-29	122
Permanent Committee May Maintain Open-Door Policy in World-Petroleum Affairs	8- 5	28
Anglo-American Representatives Sign First Formal Oil Agreement	8-12	52
Rigid Rules Established for Disposal of War Pipe Lines	9- 2	22
Double Talk Suspected in Plan to Release Controls Over Materials	9-16	68
Natural-Gas Pipe-Line Construction Overcomes Wartime Material Shortages	9-23	222
Expanded Pace of Oil Pipe-Line Building Program Is Maintained	9-23	230
Plans Under Way to Rehabilitate Allied Oil Properties in Romania	10- 7	50
Anglo-American Agreement Receiving Renewed Study	10-14	62
PAW Studies Supply and Demand Picture as of V-E Day; Avoids Postwar Planning	10-21	82
DPC's Briefalog Leaves Many Important Questions Unanswered	10-28	50
PIWC Agrees to Further Study of Anglo-American Oil Pact	11- 4	40
Soviet Effort Injects New Angle in Foreign-Oil Deal	11-11	64
Election Results Make Oil Pact an Exceedingly Vital Issue	11-18	185
Administration Expected to Ask for Early Action on Oil Pact	11-25	48
Minutes of Anglo-American Oil Agreement May Be Made Public	12- 2	38
Arabian-American Pressing Persian Gulf Construction	12- 9	52
PIWC Approves Redraft of Pending Anglo-American Treaty	12-16	56
State Department Studying Proposed Oil-Treaty Changes	12-23	56
Petroleum Affairs Unchanged in State Department Reorganization	12-30	160
REED, PAUL		
Possibility of Converting One WEP Line to Gas Service Considered by Industry	1- 6	22
Revamped Transportation System in Position to Meet Emergency Conditions	1-27	163
Applied Waterflooding Experiments in Illinois	1-27	262
Experience in Laying WEP Lines Over Varied Terrain—Paul Reed	3- 2	52
Light-Weight, Bolted-Coupling Construction Tested by Stanolind	3- 9	53
Some Operating Features of WEP Big-Inch Lines	3-16	78
Dual Completion With Crossover Packer in Dorcheat Pool, Arkansas	3-30	93
Air Repressuring for Wartime Needs of The Ohio Oil Co.	4- 6	39
New Techniques and Postwar Trends Featured by N.G.A.A.	4-20	32
Deepest Sucker-Rod Pumping East of Rockies Is in Buckner Pool, Arkansas	4-27	41
South Arkansas Operators Employ Innovations in Drilling Procedures	5- 4	48
Advances in Prime-Mover Design Discussed at Power Conference	5-11	98
Repressuring Program for Plymouth Pool Maintains Improved Production Rate	6-10	58
Application of Directional Drilling to Find Lost Hole in West Moore Well	7- 1	61
Extensive Pipe-Line Construction Will Continue in Second Half	7-29	141
Planning the Drilling Campaign Under Present Conditions	8-26	98
Modern Methods Expedite Drilling Deep Oklahoma Wildcat Oil Well	8-26	107
New Construction Methods Developed for Laying Big Pipe	9-23	150
Tennessee 1,265-Mile Pipe Line and Stations Approach Completion	9-23	162
Modern Big-Inch Construction Practices Applied to Tennessee Line	11- 4	115
Devices of Bayou Products Pipe Line	11-18	210
Design of Stanolind's Elk Basin-Casper, Wyo., Crude-Oil Pipe Line	12-23	82
Arabian Line Is a Practicable Postwar Project	12-30	164
REINHART, R. W.		
Gasoline Consumption as Related to the Postwar National Economy	4-13	133
RIESZ, C. H.; PELICAN, T. L., and KOMAREWSKY, V. I.		
Catalytic Dehydration of Natural-Gas Hydrocarbons	7-15	67
ROBINSON, J. FRENCH		
Methods of Storing Natural Gas to Relieve Peak Demands on Fields	3- 2	56
Natural Gas Spring Conference American Gas Association	5-11	105
ROBINSON, R. C., and ROEHNER, T. G.		
Separability of Lubricating Greases	11-25	76
RODDEY, O. C., and SHEPPARD, LYLE R.		
Thirteen Years of Corrosion Mitigation	9-23	210
ROEHNER, T. G., and ROBINSON, R. C.		
Separability of Lubricating Greases	11-25	76
ROSEBRUGH, C. M.		
Protecting Pumping Equipment From Fire Damage	9-23	156
ROSS, A. S.		
Theory and Practice in Equipping and Operating a Pumping Well	6-17	103
ROY, E. H.		
Water Systems at Plant Supply Steam, Process, and Personnel Requirements	7- 8	124
SALISBURY, J. KENNETH		
The Basic Gas-Turbine Plant and Some of Its Variants	5-18	59
The Basic Gas-Turbine Plant and Some of Its Variants—Part 2	5-25	101
SANSONE, F. J.		
Earnings Reflect Record Operations	6- 3	39
SAVAGE, F. C., and KALICHEVSKY, V. A.		
Field Tests Are Necessary to Evaluate Lubricating Oils	11-11	77
SCHAAFSMA, J. G.		
Use of Mass Spectrometry in Routine Analysis of Refinery Gas Samples	4- 6	57
SCHAUFELBERGER, W. M., and LILJENSTEIN, G. M.		
A Rapid Test for Isobutane Fractions in Natural-Gasoline-Plant Residue Gases	12-16	96
SHEPPARD, LYLE R.		
Thirteen Years of Corrosion Mitigation	9-23	210
SCHERER, LEWIS F.		
Shortages Force Station Designers to Employ Ingenuity in Construction	9-23	165
SCHEUMANN, W. W., and GRISWOLD, J. W.		
Chemical Laboratory Equipped for Control and Experimental Operations	7- 8	95
SCHLESMAN, C. H.		
Radiation—The New Petroleum Analytical Tool	1-13	41
SCHULZE, WALTER A., and HELMERS, C. J.		
Gas-Oil Cracking by the Cycloversion Process	4-13	225
SCHWEITZER, DR. P. H.		
Servicing Fuel-Injection Nozzles	3-30	97

	Date	Page
SECREST, L. C.		
Cathodic Protection, Its Application to a Pipe Line	5-25	82
SHAW, GEORGE V.		
Mechanical Shaft Seal for Centrifugal Pumps	4-13	251
SHEA, PAUL C.		
Long-Term Planning and Plant-Wide Cooperation Establish Safety Record	4- 6	42
SHEPPARD, LYLE R., and RODDEY, O. C.		
Thirteen Years of Corrosion Mitigation	9-23	210
SHERRIL, R. E.		
Possible Future Oil Pools of Pennsylvania	7-29	129
SHORT, E. H., JR.		
Loss of Circulation Creates Hazards in Drilling Deep Florida Well	1- 6	56
Volume Control and Regulation of High-Pressure Gas	2-10	58
Deep Gas Lift on Gulf Coast	2-17	49
Directional Salt-Dome Well Employs Highly Accurate Drilling Technique	3- 2	55
Distillate Production Corp. of Houston Completes Its New Cycling Plant Designed for Obtaining High Percentage of Propane and Butane	3-16	67
Use of Gamma-Ray Curves Increases Possibilities of Successful Workover	3-16	85
Saving of Steel Is Chief Theme at Corrosion Engineering Conference	4-13	114
World's Deepest Well	4-27	100
Labor Shortage Threatens Further Slowdown	5-11	100
Reservoir Control and Behavior Discussed at A.I.M.E. Meeting	5-18	46
Rotation-Type Gas-Lift System	5-18	67
Problems in Drilling Steeply Dipping Formations	6-10	61
Varied Topics Hold Interest at Houston A.P.I. Meeting	6-17	78
Perforating Casing Below 15,000 Ft.	6-17	106
Hydrostatically Operated Bridging Plugs in Reconditioning and Completion Work	6-17	118
PAW Action Awaited on Davies' Pledge to Consider Decentralization of Spacing Controls	6-24	52
Radiographic and Magnetic Inspection Reduces Equipment Failure	7- 8	135
Distant Offshore Seismic Survey Conducted in Gulf of Mexico	8-26	87
Abnormal Pressures Create Drilling and Completion Problems in Deep Test	9-30	70
Rio Grande Floodway Water Successfully Conditioned for Use in Drilling Rigs	10-28	63
Unloading Retrograde Condensate From Dually Completed Wells	11-18	225
Radiographic Inspection of Oil-Field Equipment in Place a Convenient Tool	11-25	91
Plastic Coating Used to Prevent Corrosion of Oil-Field Equipment	12- 2	59
Triple Injection Well Successfully Completed in Brooks County, Texas	12-23	66
SIMONS, HARRY F.		
Corrosion in High-Pressure Gas-Distillate Wells	1- 6	46
Design of Mud-Conditioning Systems for Drilling Medium-Depth Wells	1-13	51
Fluid Viscosity Key to Reverse Circulation	1-20	41
Three Ellenburger Discoveries Focus West Texas Interest on Ordovician	1-27	169
New Hope Field Shows Best Prospects for Development	1-27	186
Equipment for Reverse Circulation	2- 3	121
Application of Reverse Circulation	2-10	54
Well Pressure Affects Workover Procedure	3-23	116
Continental Uses Central Metering and Separator Batteries in North Texas	3-30	61
Heater Is Essential Part of Butane Fuel System on Drilling Rigs	5-25	77
SKELLY, JOSEPH F.		
Scale Models Speed Fluid Catalyst Cracking Units	4-13	169
SMILEY, T. F.		
Numerous Extensions and Discoveries Indicate Another Active Drilling Year	1-27	179
Several New Pools Indicate Major-Production Caliber	1-27	227
Eighty-Fifth Anniversary Finds Drake Memorial Rich in Oil Lore	8-26	83
Key Oil Men See Sharp Rise in Postwar Use of Airplane	10-14	68
Industry Turns to Aviation for Swifter Transportation Needs	11-25	54
SMITH, E. A., and BLAND, R. E.		
Properties of Typical Products Refined by Houdry Cracking Process	4-13	209
SMITH, H. R.		
Oil Flow and Storage Plan	7- 8	100
SONNEY, K. J., and WILLIAMS, C. E.		
Treatment of Gas Sands to Prevent or Overcome Detrimental Effect of Water	6- 3	51
SONNEY, K. J., and YUSTER, S. T.		
The Drowning and Revival of Gas Wells	4-20	58
The Drowning and Revival of Gas Wells—Part 2	5- 4	63
SPRAY, MAX L.		
Independents Warned of Conflict With Foreign-Petroleum Program	7- 1	36
SQUIER, JOHN P.		
Standardization of Flow Records by Adoption of the Square-Root Meter Chart	6-10	63
SQUIRES, FREDERICK		
Pressure Maintenance by Conjoint Injection of Gas and Water	2-24	70
The Structure Diorama	8-19	86
STEARNS, GLENN M.		
ENGINEERING FUNDAMENTALS—Jan. 6, Jan. 13, Jan. 20, Jan. 27, Feb. 3, Feb. 10, Feb. 17, Feb. 24, March 2, March 9, March 16, March 23, April 6, April 13, April 27, May 4, May 11, May 18, May 25, June 10, June 17, June 24, July 1, July 8, July 15, July 22, July 29, Aug. 5, Aug. 12, Aug. 19, Aug. 26, Sept. 2.		
STEPHENSON, EUGENE A., and AMSTUTZ, R. T., Jr.		
Exclusion of Water From Oil Wells	6- 3	45
STEWART, DR. J. S.		
Geology and Development of the Norman Wells Oil Field	4-27	136
Fifty-One Productive Wells in Norman Wells Field	12-30	250
STOCKMAN, L. P.		
Net Reserves Decline as Production Rises Sharply	1-27	191
Paloma Cycling Plant Engineered for Maximum Flexibility and Efficiency	3-23	128
Technical Papers Draw Large Crowds to A.P.I. Pacific Coast District Meeting	3-30	52
California's Synthetic-Rubber Project Is Now in Full Operation	4-27	34
Union Ups Capacity of Santa Maria Pipe Line and Starts Operation of New Plant	6-17	82
California Drilling Campaign Will Continue Vigorous in Postwar Era	8- 5	32
Horizontal Drilling From Vertical Hole Pioneered in California	8-12	58
Development Program at Elk Hills in Full Swing	8-19	72
Use of Cylinders in Directional Drilling Important Contribution to Technique	9-16	17
CANOL: An Engineering Project From Road Building to Completed Refinery	9-30	65
Three California Blowouts Occur Within Two Weeks	10- 7	58
Standard of California Breaks World's Deep-Drilling Record	10-21	86
C.N.G.A. Reviews Wartime Accomplishments of the Industry	10-21	93
Secondary-Recovery Papers Feature Pacific Coast A.I.M.E. Meeting	10-28	59
1,000-Mile Texas-California Gas Line to Cost $60,000,000	11-11	72
Center of Production Shifting From U. S., Geologists Told	11- 8	190
Arabian American Oil Co.'s Concession in Saudi Arabia Has Enormous Potentialities	12-30	242
STOVERN, INGRAM V.		
Arc Welder in the Die Shop	5-25	81
STULKEN, E. J.		
Effect of Ray Curvature Upon Seismic Interpretations	3-23	109
SUBKOW, PHILIP		
Geometrical Orientation of Cores	6-10	79
TAYLOR, C. M.		
Arc-Welded Lines in Oil and Gas Systems	9-23	260
TAYLOR, FRANK B.		
Analysis Shows Abundant Reserves Still in Gulf, Mid-Continent Areas	6-10	53
Kansas Water-Flood Plant Incorporates New Features in Engineering Design	1- 1	70
Completion of Ellenburger Wells in Keystone Field Requires Care	7-22	57
Compact and Enclosed Water-Flood System	7-29	148
Practical Elimination of Problems in Handling Sour Gas at High Pressures	8- 5	47
Unit Compressors as Boosters on Low-Pressure Gas Wells	8-12	71
Calculation of Gas Passed in Excess of Orifice-Meter Range	8-19	81
Permian Basin Operators May Expand Secondary Recovery	9- 2	43
TAYLOR, W. G.		
Automatic Protection in the Pumping Stations of the WEP Projects	9-23	255
THOMAS, CHARLES L., and BLOCH, HERMAN S.		
A. C. S. Abstracts	4-13	122
TODD, R. W., and POLLEY, A. B.		
Modern Methods of Reconditioning Large-Diameter Pipe	10-14	79

	Date	Page
TURNER, CHARLES F.		
Iron Oxide Versus Liquid Treating for Purifying Natural Gas	9-23	191
Liquefying and Storing Natural Gas for Peak Loads	5-18	54
TURNER, M. C., and MASE, R. P.		
Reforming and Polymerization Are Major Tools for Postwar Refining	4-13	204
TUTTLE, R. B.		
First-Year Registrants Increase at Gas-Measurement Short Course	6-17	77
Piston-Balloon Vapor Unit Saves $16,000 Annually	6-17	113
Champlin Aviation-Fuel Plant Exceeding Designed Alkylate Capacity	8- 5	67
Two Crudes Processed Separately in Double-Coil Unit	8-26	115
Associated Refinery Draws Charge Stocks From Eight Different Refineries	10-21	114
Portable Maintenance and Repair Units Prove Worth	11- 4	55
Properties and Performance of New Lube Oils Are Considered	11-18	197
Reclaimed Material Used to Build Efficient Rerun Unit	12-16	92
Salvaged O.D. Pipe Makes Pipe Column	12-23	88
VALBY, E. P., and Van WINGEN, N.		
Control and Detection of Reservoir Gas Movement in Pressure-Control Operations	12- 2	77
VAN WINGEN, N., and VALBY, E. P.		
Control and Detection of Reservoir Gas Movement in Pressure-Control Operations	12- 2	77
WADE, HENRY N., and DAWE, HAROLD F.		
Seven Compressor Stations Spaced According to Best Pipe-Line Economics	11- 4	101
Design Features of Compressor Stations on Tennessee Natural-Gas Line	11-11	100
Design of the Dehydration Plant for the Tennessee Natural-Gas Pipe Line	11-25	68
WASHBURN, GEORGE D.		
Cleaning and Gas Freeing Cargo Compartments on Tankers	6-24	101
WATTS, FRANK A.		
Greatest Number of Drilling Rigs in History to Operate This Year	1-20	16
Manufacturing Rates Rising on Most Critically Needed Petroleum Equipment	3- 9	39
Suppliers Given Assignment	3-16	54
WEEMS, G. S., EVERING, B. L., and FRAGEN, N.		
The Commercial Isomerization of Lighter Paraffins	10-28	77
WELLER, J. MARVIN		
Outline of Chinese Geology	3-23	101
WERTZ, R. E.		
Freedom of Natural Gas in Interstate Commerce	5-11	109
WHITELEY, B. W., and BUTHOD, PAUL		
1—Heat Transfer by Conduction	6-17	99
2—Determination of Mean Temperature Difference	6-24	84
3—Practical Heat Transfer Calculations	7- 1	50
4—Heat Transfer Calculations	7-15	105
5—Heat Transfer Film Coefficients—Water Being Heated	7-22	66
6—Heat Transfer Film Coefficient—Water Being Cooled	7-29	197
7—Heat Transfer Film Coefficients—Steam Condensing on Outside of Horizontal Tubes	8- 5	76
8—Heat Transfer Film Coefficients for Steam	8-12	92
9—Heat Transfer Film Coefficients—Petroleum Gases and Vapors	8-19	103
10—Shell-Side Film Coefficients	8-26	129
11—Pressure Drop Through Heat Exchangers	9- 2	56
12—Pressure Loss in Tubes of Heat Exchangers	9- 9	83
13—Pressure Drop—Shell Side of Tubular Heat Exchangers	9-16	91
14—Heat Balances	9-23	289
15—Fouling Resistances	10- 7	84
16—Economic Approach Temperature	10-14	110
17—Factors in Design and Operation of Heat Exchangers	10-21	135
WHITNEY, M. ELIAS, and FINCH, LEWIS, Jr.		
Coring With a Reverse-Circulation Rig	6- 3	49
WHYTE, C. B., and HAUGETO, KJETIL		
Subsoil Conditions and Foundations	7- 8	121
WILLIAMS, C. E., and SONNEY, K. J.		
Treatment of Gas Sands to Prevent or Overcome Detrimental Effect of Water	6- 3	51
WILLIAMS, NEIL		
Completion Practices at Oregon Basin Reduce Field Well Requirements	1-13	47
Application of Rotary Rigs for Drilling Hard Formations in Rocky Mountain Area	2- 3	130
Pressure-Operated Oil Treater Saves Equipment and Production Handling	2-17	47
Streamlined Production System	3- 9	41
Mud Conditioning in West Edmond Field Involves Special Treating Problems	3-23	135
States Urged to Prepare for Return of Regulatory Powers	4- 6	33
Pure Oil Co. Operates Closed-Type Salt-Water-Disposal System at Pauls Valley	4-20	43
Drilling Precautions Adopted to Insure Hole Protection in Heidelberg Field	5-11	111
Increased Oil Recovery by Gas Injection From Old Producing Sands at Salt Creek	5-18	57
Giant Rig on Deep Wildcat Test Powered by Total of 1,300 Horsepower	6-17	89
Special Practices Facilitate Drilling Deep Formations in Mississippi Field	6-24	70
Savings Effected by "Rolling" Tanks With Heated Oil to Clean Bottoms	7- 1	55
Cleaning Paraffin From Flow Lines in Mississippi Field	7-15	96
Drilling Rigs of All Sizes and Types Employed in Mississippi Development	7-22	45
Pressure Control of Gas Well to Supply Field Fuel Demands	7-22	54
Multiple Sands Complicate Completion Problems in Eucutta Field	8- 5	43
Drilling Methods in West Edmond Field Designed to Reduce Rig Time on Wells	8-19	78
Power Distribution—Use of Smaller Units Permits Greater Flexibility	9- 2	35
Electrification of Salt Creek Field Embraces Approximately 1,000 Wells	9-16	107
Control of High-Pressure Salt Water and Heaving Shale in Deep Gulf Coast Well	9-23	283
Contractors Urged to Work Against British-American Petroleum Treaty	10- 7	55
Independent Electric Rotary Drive for Steam Drilling Rig	10- 7	63
Contractors Told That Drilling Must Increase	10-14	66
Dredging Canals for Servicing Fields in Marsh and Swamp Districts of Louisiana	10-21	95
High Pressures and Salt-Water Flows Controlled in Deep Coastal Wells	11- 4	59
Directional Drilling as Development Aid in Coastal Louisiana Salt-Dome Field	12- 9	66
WILLSON, C. O.		
Natural Gas Conference Delegates Discuss Means of Improving Wartime Service and Strengthening Postwar Operating Positions	5-18	50
WILSON, EMMETT		
Underground Cable Provides for Communication Along Pipe Lines	9-23	243
WRATHER, WILLIAM E.		
Wartime Duties of U.S.G.S. Cover Multiple Services	3-23	102
WYCKOFF, R. D.		
Geophysics Looks Forward	3-23	85
YUSTER, S. T., and SONNEY, K. J.		
The Drowning and Revival of Gas Wells	4-20	58
The Drowning and Revival of Gas Wells—Part 2	5- 4	63
ZABA, J.		
Calculation of a Unit Pumping Installation—Oil-Well Pumping Practices—No. 24	1- 6	48
Multiple Sucker-Rod Pumping Installations—Rod Lines—Oil-Well Pumping Practices—No. 25	2- 3	124
Added Load Factors Involved in Pumping Multiple Wells—Oil-Well Pumping Practices—No. 26	2-10	62
Rules for Installation of Rod-Line Equipment—Oil-Well Pumping Practices—No. 27	2-17	54
Factors to Be Considered in Back-Side Pumping Hookups—Oil-Well Pumping Practices—No. 28	2-24	92
Locating and Balancing of Central Pumping Powers—Oil-Well Pumping Practices—No. 29	3- 9	64
Determining Distribution of Loads on the Eccentric—Oil-Well Pumping Practices—No. 30	3-16	91
Methods of Torque Analysis in Central-Power Operation—Oil-Well Pumping Practices—No. 31	3-23	119
Deep Production Emphasizes Value of Rodless Pumping Practices—Oil Well Pumping Practices—No. 32	4- 6	52
Paraffin Important Problem in Hydraulic Pumping—Oil-Well Pumping Practices—No. 33	4-13	271
Factors Affecting Design of Hydraulic Pumping Systems—Oil-Well Pumping Practices—No. 34	5- 4	67
Function and Operation of Submergible Electric Pumps—Oil-Well Pumping Practices—No. 35	5-25	108
Characteristics of the Submergible Electric Pump—Oil-Well Pumping Practices—No. 36	6- 3	62
Calculation of Fluid Levels by Sonic Determinations—Oil-Well Pumping Practices—No. 37	6-24	90
Factors Affecting Servicing and Reconditioning Pumping Wells—Oil-Well Pumping Practices—No. 38	7- 1	78
Methods for Prevention and Removal of Paraffin Deposits—Oil-Well Pumping Practices—No. 39	7- 8	140
Removal of Paraffin From Tubing—Oil-Well Pumping Practices—No. 40	7-15	80

Recommended Books on Petroleum and Related Subject

MARCH 1, 1945

Air and Gas Compression—GILL	3.00
Arc Welding in Design, Manufacture and Construction	1.50
Asphalts and Allied Substances—ABRAHAM	12.50
Catalytic Reactions at High Pressures and Temperatures—IPATIEFF	7.50
Chemical Buyers Guidebook	2.00
Chemical Engineer's Handbook—PERRY	10.00
Chemical Technology of Petroleum—GRUSE & STEVENS	7.50
Chemistry of Petroleum Derivatives, Vol. I—ELLIS	18.00
Chemistry of Petroleum Derivatives, Vol. II—ELLIS	20.00
Condensed Chemical Dictionary, The—TURNER	12.00
Conversion of Petroleum—SACHANEN	6.00
Corrosion: Causes and Prevention—SPELLER	7.00
Covenants Implied in Oil and Gas Leases—MERRILL	10.00
Diesel Engineering Handbook—MORRISON	7.00
Done in Oil—LEVEN	10.00
Elements of Chemical Engineering—BADGER and McCABE	5.00
Elements of Diesel Engineering—ADAMS	4.00
Elements of Fractional Distillation—ROBINSON	3.00
Elements of the Petroleum Industry—A.I.M.E.	5.00
Examination of Fragmental Rocks—TICKELL	4.00
Exploration Geophysics—JAKOSKY	8.00
Field Geology—LAHEE	5.00
Flush Production—FORBES	2.75
Fuel Flue Gases	5.00

Book Department
THE OIL AND GAS JOURNAL
Tulsa 1, Oklahoma

Please send the following books for which I enclose $.....

Title Author

.....

.....

.....

.....

NAME .....

STREET ADDRESS .....

CITY ..... STATE .....

Gas Engineers' Handbook	
General Engineering Handbook—O'ROURKE	
Geologic Structures—WILLIS	
Geology of Natural Gas—A.A.P.G.	
Geology of Petroleum—EMMONS	
Geomorphology—LOBECK	
Geophysical Exploration—HEILAND	
Geophysical Prospecting for Oil—NETTLETON	
Handbook of Butane-Propane Gases—KRAPPE	
Heat Transmission—McADAMS	
Law of Oil and Gas Leases and Royalties—GLASSMIRE	
Cumulative Pocket Supplement (1943) to Above Book	
Lubricants and Lubrication—CLOWER	
Lubricating Greases—KLEMGARD	
Manual of Style for Editors, Compositors, and Proofreaders of The Oil and Gas Journal	
Mechanical Engineers' Handbook—MARKS	
Mid-Continent Oil and Gas Forms	
Miocene Stratigraphy of California—KLEINPELL	
Modern Methods of Refining Lubricating Oils—KALICHEVSKY	
Natural Gas Handbook—DIEHL	
Oil and Gas Forms—BENOIT	
On the Edeleanu Process—DEFIZE	
Petroleum Development and Technology—A.I.M.E.	
Petroleum Dictionary—PORTER	
Petroleum Industry, The: An Economic Survey—SHUMAN	
Petroleum Production—CLOUD	
Petroleum Production Engineering, Vol. I—UREN	
Petroleum Production Engineering, Vol. II—UREN	
Petroleum Refinery Engineering—NELSON	
Physical Constants of Hydrocarbons, Vol. I—EGLOFF	
Physical Constants of Hydrocarbons, Vol. II—EGLOFF	
Piping Handbook—WALKER & CROCKER	
Polymerization—BURKE, WEITH, THOMPSON, and WILLIAMS	
Practical Accounting for Oil Producers—PITCHER	
Practice of Lubrication—THOMSEN	
Principles of Sedimentation—TWENHOFEL	
Procedure Handbook of Arc Welding Design and Practice (6th Edition)	
Reactions of Pure Hydrocarbons—EGLOFF	
Regulation of Pipe Lines as Common Carriers—BEARD	
Ring Index, The—PATTERSON and CAPELL	
Rotary Drilling Handbook—BRANTLY	
Scientific Principles of Petroleum Technology—GURWITSCH	
Soil Corrosion and Pipe Line Protection—EWING	
Stratigraphic Type Oil Fields—LEVORSEN	
This Fascinating Oil Business—BALL	
Volumetric and Phase Behavior of Hydrocarbons—SAGE & LACEY	
Welding Encyclopedia (1938 edition)	